

MEDICAL INSTRUCTIONS

TOWARDS THE

PREVENTION, AND CURE

OF

Chronic or Slow Diseases

PECULIAR TO

W O M E N:

Especially, those proceeding from over-delicacy of Habit called Nervous or Hysterical; from Female Obstructions, Weakness, and inward Decay; a diseased state of the Womb, or critical change of Constitution at particular Periods of Life; in which, their Nature is explained, and their Treatment, by Regimen, and simple Medicines, divested of the Terms of Art, is clearly laid down, for the use of those affected with such Diseases, as well as the Medical Reader.

By J O H N L E A K E, M. D.

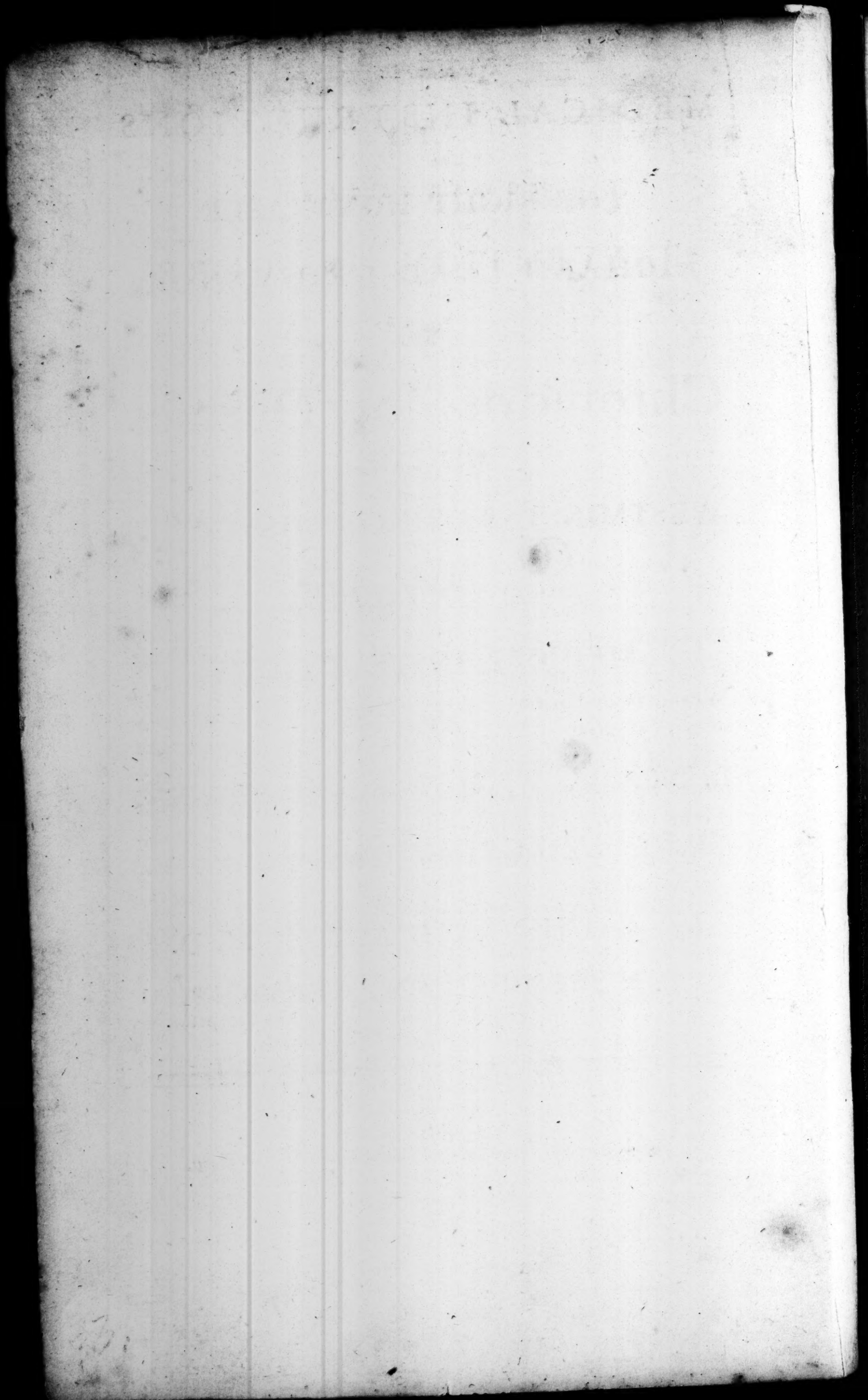
Member of the Royal College of Physicians, London;
and Physician to the Westminster Lying-in Hospital.

L O N D O N:

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TO
THE RIGHT HONORABLE
RICHARD LORD GROSVENOR,
AS
PRESIDENT, AND PATRON
OF THE
WESTMINSTER LYING-IN HOSPITAL;
THE FOLLOWING
MEDICAL INSTRUCTIONS
ARE
DEDICATED WITH PROFOUND RESPECT,
BY HIS LORDSHIP'S
MOST OBLIGED, AND
MOST OBEDIENT SERVANT,
THE AUTHOR.

*London, Craven Street, Strand,
March 10th, 1777.*

Now published, being the *Third Edition corrected*, Price 5s.

PRACTICAL OBSERVATIONS on the *Acute Diseases incident to Women*, under the following heads:—Observations on the CHILD-BED FEVER; deduced from the symptoms of that disease taken from the living body, and from an examination of its *morbid appearances after death*, together with the methods most conducive to its cure; illustrated with *cases and forms of medicine* adapted to each.

On the Prophylactic Method, or means contributing to prevent the *Child-bed Fever*.

On the nature and treatment of *Floodings*.

On the cause and cure of *Convulsions*, and the diseases most fatal to women during the state of pregnancy.

By JOHN LEAKE, M. D.

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* * * The *Practical Observations* are now translated into the French and German Languages.

Dr. Leake's PUBLIC LECTURES

O N

MIDWIFERY, and the *Diseases peculiar to Women and Children*,

Will commence, from time to time, as usual, at his House in Craven Street, London, where Particulars may be known.

* * * Female Pupils may be privately instructed, and will have the Privilege of residing in the WESTMINSTER LYING-IN HOSPITAL, till duly qualified.

GENERAL CONTENTS.

INTRODUCTION page 9

CHAP. I.

SECTION I.

Of the Menses, or Periodical Discharge peculiar to women, in its natural state, commencing at the age of Maturity. 43

SECTION II.

Of the Periodical Discharge in a diseased State; namely, when irregular, obstructed, or immoderate in quantity. P. 55

SECTION III.

Cessation of the Periodical Discharge, in the decline of life, and the Disorders arising from that critical change of Constitution. p. 84.

6 GENERAL CONTENTS.

CHAP. II.

*Diseases of the Womb, and its contiguous parts;
Their Treatment, and Method of Cure.*

SECTION IV.

*Of the Fluor Albus or female Weakness; and
how distinguished from a Venereal Infection.*

P. 95

SECTION V.

*Of a Schirrus, Cancer, and an Ulcer of the
Womb; and of diseased Tumors of that Or-
gan.*

P. 107

SECTION VI.

Of the Descent or Bearing down of the womb.

P. 123

SECTION VII.

*Of Abortion, and Barrenness; and the Remedies
most effectual in preventing those Maladies;
with Rules and Cautions for the Conduct and
Regimen of Women, during the several
Stages of Pregnancy.*

P. 136

GENERAL CONTENTS. 7

SECTION VIII.

Of the Hæmorrhoids or Piles; Obstruction or Incontinence of Urine, Strangury and Ulceration of the Bladder. p. 158

CHAP. III.

SECTION IX.

Diseases of the Stomach and Bowels; their Treatment and Cure. p. 177

SECTION X.

Of Nervous Disorders, Hysteric Affections, Low Spirits, and Melancholy; their Treatment and Cure. p. 218

SECTION XI.

Of a Consumption; or inward Decay; its Treatment and Method of Cure. p. 274

SECTION XII.

Of the Dropsy; and its Method of Cure. p. 320.

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SECTION XI.

Of a Consumption; or inward Decay; its Treatment and Method of Cure. p. 274

SECTION XII.

Of the Dropsy; and its Method of Cure. p. 320.

8 GENERAL CONTENTS.

CHAP. IV.

SECTION XIII.

*Diseases of the Skin; and of Glandular or
Cancerous Swellings of the Face, Neck,
and Breasts.* p. 338

SECTION XIV.

*The Influence of the Passions on the Body, and
Mind; and Effect of Climates, or Changes
of Weather, on Delicate Constitutions.* p. 351

SECTION XV.

*The Salutary Power of Air, Diet, Exercise,
and Simple Medicines, in the Prevention and
Cure of Chronic Diseases.* p. 392

SUPPLEMENT.

*Necessary Instructions for those who consult a
Physician by Letter.*

*Simple Forms of Medicine referred to in the
preceding Work.*

INTRO-

INTRODUCTION.

IT has been observed, that women often regard unimportant knowledge, whilst they neglect the means of being sufficiently acquainted with what concerns their health; a blessing so inestimable that it gives relish to all our enjoyments, and without it, the possession of life itself becomes irksome and no better than a state of penance. From this inattention, many popular errors and absurd opinions are, at present, as superstitiously adopted and obstinately adhered to, as in the days of *Aristotle*.

To examine and reject such customs as tend to prejudice the understanding and injure the health; to point out the danger-

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ous abuse of powerful medicines; and to afford women an adequate idea of their own disorders, as well as the most gentle and effectual methods of treating them, is the intention of the following *Medical Instructions*: If from thence a cure is not always to be expected; they will, at least, be enabled to distinguish, whether such complaints may safely be trusted to *Regimen* and *Simple Medicines*, or whether they are dangerous in their nature, and therefore require more immediate advice and assistance.

For several years past, especially since I declined the practice of midwifery, my attention has been more particularly directed to that branch of medical science, which comprehends the nature and treatment of *Female Diseases*; and the rather, in consequence of being Physician to the WESTMINSTER LYING-IN HOSPITAL, as well as from a desire to fulfil my engagements with those gentlemen who attended my *Public Lectures* on that subject.

About

About four years ago I published my *Practical Observations on the Acute Diseases incident to Women*, now translated into *French*; and however the public approbation, on that occasion, might have done honour to a work of superior merit; I am desirous to acknowledge it as I ought; and confess it has, in some measure, given rise to the following *Medical Instructions*, which I now venture to lay before the public, towards the prevention and cure of such *Chronic* or *Slow Diseases* as experience and attentive observation have suggested to me from time to time.

This, with the former volume, tho' unconnected with each other, contains the treatment of all such maladies incident to women, whether *acute* or *chronical*, as are most dangerous and difficult of cure.

Should the undertaking appear exceptionable to some, from the simplicity of its plan, which adapts it to *general comprehension*, on the principles of *common sense*; I trust there are many of liberal minds and disin-

terested views who will approve a design so manifestly tending to the public good ; and as to the execution of it, that I must submit to their judgment and candor.

It would, indeed, be unnecessary that women should attend to physic in a methodical and scientific manner ; the idea of every woman being her own physician is ludicrous in terms, and would be no less absurd in its application, than that every man should become his own tailor. But surely, there are many degrees between consummate knowledge and profound ignorance ; and altho' it may not either be expedient or practicable to attain the first ; she will, at least, avoid the danger and inconvenience arising from the last.

If, in the following sheets, I have laid much stress on the salutary power of *Regimen* and *Simple Medicines* ; it was from a thorough conviction of their great efficacy, and that they afford the most gentle and natural means of curing *Chronic Diseases*.

They

They must have a slender title to knowledge, who limit the cure of such maladies to the sole use of medicines ; and it ought to be remarked, that nothing can properly be considered as such, which does not relieve or cure, however dignified by particular names importing its superior efficacy ; and on the contrary, if the disease is removed by *Air*, *Diet* and *Exercise*, or the most innocent *Vegetable Simples* ; they are then to be looked upon as medicines to all intents and purposes.

It may indeed be allowed, that in *Acute Diseases* which are soon terminated by recovery or death ; the advantages of regimen are not quite so obvious ; insomuch, that, loss of time, inattention or improper treatment in the beginning, or at the crisis of a fever, have often been attended with fatal consequences ; which probably might have been prevented by the seasonable administration of *antimony*, the *peruvian bark*, or such like powerful medicines. Therefore, contrary
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to the opinion of the celebrated *Tissot*; *Acute Diseases*, rather than those of the *Chronic* kind, become the more immediate object of a physician's attention.

As little has been said on female diseases in a practical and intelligible way, I thought the present undertaking the more necessary; for altho' *Tissot* in his *Advice to the People*, and *Buchan* in his *Domestic Medicine*, have wrote excellently and judiciously on diseases in general; they have, in a great measure, omitted those peculiar to women, except such as arise from the obstructed menses, pregnancy and child-birth.

A few years ago, a Treatise appeared on female diseases, by *H. Manning*, M. D. in which he takes a judicious and comprehensive view of his subject; but that work, tho' a valuable one, seems rather to have been calculated for the medical profession, than the perusal of the female reader.

The authors already mentioned, as well as the celebrated *Van Swieten*, late physician
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to their Imperial Majesties ; M. *Rosen*, physician to the King of *Sweden* ; together with *Arbutnot*, *Fuller* and *Cheyne*, who have all written on the same liberal and simple plan ; shew, that respectable precedents are not wanting on this occasion ; and consequently, that no apology can be necessary for my present undertaking.

With such as are to profit more from the administration of medicines, than by enforcing the *benefits of Regimen* ; it may appear a very unpopular task to shew the abuse and inefficacy of the one, or good effects of the other ; but a demonstrable truth ought always to carry conviction along with it, whether it be for our interest or against it. If any are to be found who cannot assent to this opinion, I hope the number is but small.

To follow what we disapprove, and act in contradiction to our own feelings ; to be afraid of doing justice and speaking the truth, argues the most temporizing and slavish

ish conformity to customs ; “ more honour-
“ ed in the breach than the observance”.
I can truly say, that I have long thought,
something like the following work might
be productive of general good ; and that I
have done all in my power to make it an-
swer that desirable purpose ; therefore, I now
present it to the public, and in a particular
manner devote it to the service of the *Female*
Sex.

Were women as attentive to their health,
as to the extremes of fashion and false orna-
ment ; it would be a fortunate circumstance
for themselves as well as their progeny ; but
as this is rather to be wished than expected ;
it may be necessary to remind them, that,
altho’ health does not altogether constitute
beauty ; beauty is the child of health, and
cannot long exist without her parental in-
fluence.

In vain therefore do they seek to pre-
serve the one without due regard to the
other : *The great secret of improving or re-
taining*

maintaining beauty consists in the art of preserving health: 'Tis that which animates and lights up the countenance with expressive and bewitching smiles ; which touches the lip with vermilion, and diffuses o'er the cheek a freshness and vivid glow surpassing circassian bloom ; it gives balmy sweetness to the breath, and lustre to the eye. But let sickness and fell disease, for a while, overshadow the beauteous form, and its appearance is no longer retained. The polished surface, and snowy whiteness of the skin are exchanged for wrinkles, and a fallow hue ; the lustre of the brightest eye is tarnished, and the blooming cheek will fade !

Was it further necessary to shew the great importance of health, and estimation it was held in by the wisest people in all ages ; we need only take a view of the various means they devised to preserve or attain it.

In the infancy of physic, the *Ægyptians* and *Chaldaeans* first introduced the method of placing the sick and diseased in public
C streets

streets and highways, in order to receive information from travellers passing by ; how, and in what manner they themselves had been cured of the like diseases. *Herodotus* tells us, that the *Babylonians* obliged themselves by a law to conform to the same wise custom : In *Greece* it also prevailed, where offerings on *votive tables* were hung up in the temple of *Æsculapius*, the God of phyfic ; on which the nature of the disease, and medicines which cured it, were engraved and recorded for the public good. From those rude outlines, the venerable *Hippocrates* collected his *aphorisms*, so justly admired for many centuries, and delivered down to posterity as the very basis of medical knowledge.

When we look back on the slender causes which have given rise to the noblest productions of *nature* and *art* ; we need not be surprized, that by such information, great advances were made in the method of curing diseases. Those who practised in this simple

ple manner, were not deluded by *theory* or *hypothesis*, but judged by the evidence of their own eyes; taking it for granted, that what had cured one, might prove equally salutary to another, under the like circumstances; and it may be remarked, that knowledge thus experimentally obtained, is more genuine, and less fallacious, than that of which we become possessed by more elaborate means.

Knowledge ought not therefore to be despised because it springs from humble sources, but rather should be considered like gold in the mine, which lies buried with baser metals; and often is brought to light by mere chance, after human industry had sought for it in vain. In this manner, the lord of the creation, with all his boasted reason, has often been obliged to borrow information from the beasts of the field, the birds of the air, and the lowest order of the insect tribe; according to the elegant poet of the following lines.

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Thus,

- “ Thus, then to man, the voice of nature spake,
“ Go, from the creatures thy instructions take :
“ Learn from the *birds* what food the thickets yield ;
“ Learn from the *beasts* the phyfic of the field ;
“ Thy arts of building from the *bee* receive ;
“ Learn of the *mole* to plough, the *worm* to weave ;
“ Learn of the little *nautilus* to sail,
“ Spread the thin oar, and catch the driving gale.

A. POPE.

After the discovery of a new world in *America* ; the virtues of many vegetables were made known by the native savages to the *Europeans*, who by their superior skill in phyfic, greatly extended and improved the use of those salutary medicines ; but, as we have not a *Specific* for every disease, like the *peruvian bark* for the cure of intermittent fevers ; 'tis evident, that great judgment is necessary, to make one and the same medicine answer many different intentions of cure.

The element of *fire*, when used with discretion, will cherish and warm the body ; but, if applied in too great a degree, it becomes destructive ; and *wine*, the most generous

rous of cordials, which exhilarates and makes the heart glad, if taken in excess, will benumb the senses, and turn the man to beast.

Like those perverted blessings, are *powerful medicines* when misapplied; for, that sovereign remedy the *peruvian bark*, and the almost divine powers of *opium*, are in their own nature the same, whether in the hands of the ignorant or skilful; altho' the difference of effect will be very great, according to their proper or improper use: On the one hand, they will prove salutary; on the other, dangerous and destructive.

It is not, therefore, the thing itself, so much as its use or abuse, which constitutes the *remedy*, or the *poison*. Hence the ignorance and folly of those who collect a number of *Receipts*, or forms of medicine, without sufficient judgment or skill to apply them. It would not be more absurd for a half-blind sportsman to burden himself with powder and shot, altho' he was unable to see the game.

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That sagacious and incomparable physician, *Sydenham*, whose skill was equalled by nothing so much as his exceeding honesty; after long and extensive experience, at last, comprized all his medical knowledge in a small work, which he called by the significant name of *Processus integri*, or the proceeding of an honest man. This valuable production he carefully drew up for the use of his son, but in a plain and simple style, such as best becomes the truth.

By diligent and repeated observation, he discovered, what his envious co-temporaries could not before find out, with all their pretended subtlety and acuteness of reasoning; namely, that the free and unlimited use of *Fresh Air* and *Cold Fluids* were indispensably necessary in the *Small Pox*; and that the contrary method was the sure way to kill the patient, altho', in his time, it was the prevailing practice. This I mention to shew the superiority of practical knowledge, and the fallacy of those who expect to cure diseases

eases without it; as well as to demonstrate the power of *Cooling Regimen*, which did more in subduing that destructive disease, than all the medicines before devised for its relief.

If the efficacy of *Regimen* is so very apparent in *Acute Diseases*; the propriety of its use in maladies of the *Chronic Kind* will still become more self-evident: for, as they are attended with less immediate danger; so it may be the longer continued, and varied, according to the nature of particular circumstances, in such a manner as to produce a gradual, lasting, and salutary change in the whole bodily system; especially when assisted with *mild and simple Medicines*.

Instead of this rational method of proceeding in such cases; a *Farrago*, or unnatural hodge podge, is often directed for the patient; where many ingredients of contrary qualities are jumbled together, in spite of their own enmity to each other. The jarring elements of *Fire* and *Water* might as well be expected to agree. But, even admitting

ting the efficacy of the several ingredients when separately considered; according to such modes of prescription, there is generally too small a quantity of any one of them, to make it act with sufficient power.

What then is to be expected from such compositions, which, either considered in whole or in part, exclude every idea of answering their proposed end? But should the event prove favorable; it would be utterly impossible to determine which of those several ingredients was most instrumental in the cure; and consequently no improvement could from thence be made in the art of healing. Such mixtures are well calculated to keep both the patient and those who direct them in profound ignorance of what is productive of good, if fortunately such should be their effect: They may indeed, as usual, be said to be made *according to art*, for nature has nothing to do with them.

From whence this extraordinary fondness for compound medicines could proceed,
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it is not easy to discover; without it was from ignorance of the true qualities of *Simples*. Why should we attempt to do that which nature with her own salutary hand, and more than chemical exactness, has done much better? for, every plant is, in reality, a compound of *Oil*, *Spirit* and essential *Salt*; differing in specific quality, according to the proportion of those principles: The *Water*, *fixed Salt* and *Earth*, which they likewise contain, being the same in all plants whatever.

Such substances then are already prepared for the purposes of medicine; but if we torture and disjoin their parts, we defeat the intention of nature, by making them what they were not before; and thus *convert natural medicinal substances, into dangerous artificial poisons*.

The *Bitter Almond*, for example, contains both a *Poison* and its *Antidote*; since, in its natural state, it may be taken as nourishment with the greatest safety; but only se-

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parate from it the two sorts of *Oil*, of which it is possessed; the one from its husk or membrane, by distillation; the other from its white or mealy part, by pressure; and we shall find that ten drops of the first, in an ounce of water, will kill a dog in half an hour; whilst on the contrary, the other is friendly to the constitution, and affords wholesome nourishment.

Surely there is a nearer road to the cure of *Chronic Diseases*, than by the stomach and bowels, from what are called medicines: But the wide-extended path of nature is often deserted, whilst men are ridiculously employed in making their way thro' narrow avenues beset with briars and thorns; and so long as they profit largely by this kind of labour, or like post horses are paid by the mile, 'tis no wonder, that now and then, they should go a little about.

Whatever benefit is suddenly produced by the effect of powerful medicines, is generally done with some degree of violence
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to the constitution, and is seldom lasting; whereas, *Air*, *Diet*, and *Exercise* do not like the former, affect particular parts of the body, and for a short time only; but are always acting upon the general habit in a natural, uniform, and gentle manner. Those remedies do not pall the stomach and subject the patient to a severe penance; but, on the contrary, increase the appetite and strength, invigorate and cheer the spirits, promote a free and equal distribution of the blood through its vessels, as well as the several discharges depending on a due circulation.

Diseases which are slowly produced, can only with safety be slowly taken away; and few I believe will oppose a truth so manifest, or deny that this purpose is best effected by *Air*, *Exercise*, and a *medicated Diet*. Those are the *Grand Alteratives* in nature's Dispensatory, those the mild but *powerful Simples*, which in due time will produce a salutary and lasting change; attended with a cir-

cumstance which cannot fail to recommend them, viz. they may be *beneficial to all*, and can be *hurtful to none*.

It is but seldom that *Chronic Diseases* proceed from any natural defect in the construction of our bodily organs, or the undue performance of their office; those only excepted which are hæreditary or derived from the parent. In general, they are the offspring of intemperance and irregularity of the passions, which, by weakening the nervous influence, impairs both appetite and digestion, and renders the natural discharges of the body irregular and defective.

To those causes may be added some others arising from acute diseases, terminated by an imperfect or unfavorable crisis; and consequently, badly cured by nature or art. The too frequent and unseasonable loss of blood by the lancet, or the preposterous use of strong medicines, as *Vomits*, *Purges*, *Mercury*, and the like, also lay the foundation for slow diseases.

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Diseases peculiar to certain places, which are therefore called *endemial*, as well as those happening in different nations and climates ; or according to the nature of people's various employments and manner of living ; all evidently shew, how much the health may suffer from causes always present to the body, and insensibly acting on the constitution.

From this obvious and self-evident circumstance, we may expect to prevent, or cure the most obstinate chronic diseases, by the long continued use of *Regimen* and *Simple Medicines* ; which being regularly persisted in without violence to the constitution, have the power to produce in the body a gradual, and as it were, a kind of mechanical change.

In short, if the damp, unwholesome air of particular places, has been found to occasion *Agues* and *Dropsies*, peculiar to such situations, as in the *Fens of Essex* and *Cambridgeshire* ; if a total abstinence from fresh vegetables, and the excessive use of salt and smoke-

smoke-dried animal food ; or living in low, marshy places, contiguous to the sea, have, in a thousand instances, been known to produce the *Scurvy* ; and if a sedentary, inactive life, has been observed to enervate the body, bring on indigestion, paralytic numbness and wasting of the limbs, hysterics and melancholy ; it will then follow, from the principles of common sense, that the use of dry, clear air ; simple vegetable food ; and moderate exercise ; will not only prevent, but also powerfully contribute to the cure of such diseases ; since those may be all uniformly applied to the body, and will constantly act on every part of the whole, in a manner, directly opposite to the morbid causes.

Those are the great and universal Remedies which nature calls to her aid in the cure of diseases : They are not, like particular substances, taken from a changeable *Materia Medica*, the medicines of to-day and to-morrow ; but will permanently continue to exert their sovereign power, to the end of
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the world. How different is the fate and effect of many things which ignorance and superstition, or the excessive caprice of mankind, had, for a season, stamp'd as genuine and infallible? For, as the hand of time shall shift the scene, and tyrant custom prevail; those very medicines and modes of practice, which have so much captivated their enamored votaries, will, like those which went before them, be viewed by posterity as mere airy nothings, the very baubles and bagatelles of the science.

I would not from hence be understood to mean, that *Regimen* should entirely *supercede the use of Medicines*; on the contrary, I know they are often necessary and highly beneficial. But it is much to be regretted, that many insignificant trifles have been introduced into practice, and much confided in, whilst *Regimen* has been almost entirely neglected, and set aside. The preservation and recovery of health rather depend on temperance and the regulation of the passions; the
proper

proper choice of medicatèd aliment, and the common benefits of fresh air, and moderate exercise, than the frequent administration of medicines.

Whatever is too subtle for the comprehension of moderate understandings, and minute for the eye of common sense, promises but little advantage in the attainment; for it may be asserted as a general truth, that the most useful part of every science is the most obvious and striking at first view: Many of those which formerly were mysterious and abstruse; when stripped of their foppery and parade, became intelligible to common capacities. The sublime science of *Astronomy* has been made easy of access by that elegant writer and polite philosopher *Fontanelle*. *Geography* and *Natural History* have also now been laid down upon the most simple principles; and I think there can be no sufficient reasons why *Physic* may not likewise venture to speak in plain and intelligible language.

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The general interest of the art can never suffer by such a proceeding ; for, by informing the minds of men with a just idea of its true nature, and shewing, that like other sciences, it is limited in its extent ; many unreasonable prejudices would be obviated and removed.

They would not then complain of disappointment in not being cured of diseases absolutely incurable ; but, on the contrary, would be taught to know, that by proper rules and cautions some diseases might certainly be prevented ; that several might be perfectly cured ; that some could only admit of relief ; and that others, from an internal decay of the organs or instruments of life, are, in their own nature, utterly incurable ; without the physician was possessed of a power to create new parts where the old ones were worn out and destroyed.

Besides ; a competent idea of this subject would enable them to distinguish modest merit from presuming ignorance ; and to form a proper judgment of such as

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are fittest to be intrusted with the care of their health, independent of mere names in vogue; to which accident, or more exceptionable causes, have often contributed not a little. In a word, the credit of the medical science, and the interest and honour of those who profess it, can never be better or more properly supported, than by such liberal and direct proceedings as tend to the relief of those who employ them; whether that is to be done by the administration of medicines, the use of air, diet and exercise, or the united power of the whole.

Health is so important a blessing, that people are entitled to the best information they can get concerning it, and to the privilege of seeing with their own eyes; instead of being hoodwinked and led blindfold by the delusive promises of quacks, impostors, and water-doctors, who pretend to discover the face of the disease on the surface of the urine, as in the very mirror of truth.

In

In the common occurrences of life, they generally examine what they intend to purchase with a penetrating eye, and place it in every point of view before they make it their own; but in the important article of health, their discernment seems to forsake them; for, very sensible minds are observed to be not a little influenced by the example of the multitude; and instead of judging for themselves, or confiding in those who, from principles of honor, are sparing of their promises; they often weakly put their trust in such as deal in promises only.

The medical science, as to its proposed end, is the most noble and useful of all others; having nothing less for its object than the preservation and recovery of health, which is the very basis of human happiness; for sickness and diseases not only rob us of all enjoyment, but, at last, of life itself: If the means by which it ought to be effected have sometimes been abused; that is not the fault of the science, but of those who are unworthy to profess it.

The useful part of medicine stands in no need of a mask to cover its real form ; the more it is unveil'd, the more its native excellence will be displayed ; but where it has made use of meretricious arts to delude and seduce the unwary ; let it be stripped of such tinsel ornaments, and stand exposed to open view.

In the following *Medical Instructions*, I have concentrated or drawn into a narrow compass, all that appeared truly useful and interesting in the prevention or cure of *Female Diseases* ; and, although I have availed myself of whatever contributed most to that design ; I have, throughout the whole, principally depended on such experimental facts as occur'd to me in practice. All nice and perplexing distinctions relative to their remote causes ; quotations from medical authors ; or a recital of particular cases, which would have rendered the work tedious, have been omitted as foreign to my design.

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The subject demanded a style the most simple and plain to make it more universally understood; for, to write in a manner unintelligible, would, in effect, have been the same as not writing at all. I have therefore been obliged to exclude many terms of art, and adopt others less elegant in their place, which was a real disadvantage to the language; and indeed, I often found myself not a little embarrassed between the extremes of indelicacy and obscurity, both which I was desirous to avoid.

Notwithstanding this work was principally intended for the *Female Sex*, many of whom are too far from proper advice, or unable to pay for it; I am inclined to think it will merit the perusal of more competent judges; being part of such doctrines as I have advanced in my *Public Lectures on Midwifery*, and adopted with success in the course of several years practice. It will afford useful and necessary information to all those engaged in that branch of science, or
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to such as desire a competent knowledge of the female constitution and the true nature of its several diseases; which, *being alternately the effect and cause of the obstructed or redundant menses*, are, of all others, the most complicated and difficult of cure.

From this peculiarity in those maladies, they have often been imperfectly understood and injudiciously treated; consequently, without proper advice can be had, it would be better to let nature take her own course, even when she seems to deviate, than intrust her to the conduct of those who are blind. This caution is the more necessary, as daily instances occur, where women, from false delicacy or culpable reserve, commit themselves to the care of those who have no adequate idea or real knowledge of such diseases: As they see no danger, so they think there is none to be feared; and therefore, often venture on the use of the most powerful medicines, which, although good in them-

themselves, become liable to the most fatal abuses, by their inconsiderate and improper application.

Much pains have been taken to cure diseases, but very little to prevent them; although the last intention depends as much upon rational principles, and may be as properly reduced to an art as the former.

If the cure of diseases is a thing of great importance to the general good; the *art of preserving health* is a matter of still greater moment; for, many diseases, especially those of long continuance, do not always admit of a certain cure. They may not indeed prove suddenly destructive; but the constitution receives a shock from every attack which weakens the springs of life, and takes something from its length of days.

He who could find out the art of preserving buildings from fire, would more justly be entitled to praise and reward, than one who only helps to extinguish the flames after they had been half consumed.

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Although it is not so much the interest of the profession to prevent diseases, as to cure them; it is equally their province and duty; and if attention was paid to this branch, by means proportioned to the end, they would probably be more successful in the first, than last: Yet such is the fatality of medical science in what concerns the *Prophylaxis* or *prevention of diseases*, that many salutary rules and cautions, demonstrably tending to the preservation of health, are either blindly overlooked, or totally neglected; and many pernicious customs still retained, to its manifest injury.

The source of this error seems to arise from people not being duly sensible of the evils they might certainly avoid on this occasion; for, in general, advice, and the apparent services resulting from it, are undervalued and disregarded, on the mere presumption that the diseases they are said to have prevented, would probably never have happened. But if intemperance, and neglect
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are known to destroy health; temperance, and prudent caution will as certainly preserve it. *Valetudinarians* would therefore act a friendly part to themselves, in supposing a physician as much entitled to reasonable gain, for laying down rules towards the prevention of diseases, and preservation of health, as he who should prescribe medicines with a view to restore it.

If some faults, therefore, fall to the share of the medical profession; others may justly be imputed to those who employ them. Very unreasonable advantages are, sometimes taken of the most liberal and disinterested conduct. The visits of a physician, or attendance of an apothecary, are often requisite, when the first finds it unnecessary to prescribe medicines, or the last to prepare them: There are seasons when they ought to be discontinued as well as administered; and every one who has judgment and probity will duly regard such distinctions; but this cannot possibly be done without seeing the

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patients

patients from time to time ; and consequently, visits made on those occasions, being equally important to their safety, ought to be regarded as such.

Some of those employ'd in *Pharmacy* are to be found whose knowledge and integrity would not degrade a more exalted rank in the medical profession ; and it is a real hardship, that such as honesty forbids to direct medicines, where none are necessary, should suffer in their interest on that account.

I shall say nothing more by way of introduction, but only request the Reader to pass over with indulgence such *typographical errors* as were unavoidable in a work, where my attention was frequently called off, and interrupted by other necessary occupations.

CHAP.

C H A P. I.

SECTION I.

Of the Menses, or Periodical Discharge peculiar to women, in its natural state, commencing at the age of maturity.

TOWARDS a more perfect knowledge of the *chronical diseases* incident to women, and as an introduction to their treatment and cure, it will be necessary to explain the nature and tendency of the *periodical discharge*, and to consider a remarkable change produced in the constitution, about the time of its first commencement.

A minute discussion of the many speculative points and contraverted opinions mentioned by authors, would rather embarrass and perplex, than instruct the female reader ;

44 PERIODICAL DISCHARGE.

it will be sufficient to lay before her such plain and obvious circumstances as afford a general idea of the subject, and tend to dispossess her mind of such prevailing errors, as might otherwise influence her conduct, to the prejudice of her health.

First then, it should be remarked, that a woman's constitution is endowed with the power to prepare a larger quantity of that vital fluid called *blood*, than is necessary for the immediate subsistence of her own body; the overplus being intended for the nourishment of her child in the womb; and lest it should over-fill the blood-vessels and incommode her constitution, when she is not pregnant; provident nature has ordered it to be carried off by the womb once a month: It is therefore properly called the *Monthly Discharge*.

'Tis evident that this superfluous blood was intended for the service of the child; because, both in *pregnant women and nurses who give suck, the menses are naturally wanting*:
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PERIODICAL DISCHARGE. 45

In the first they are consumed by its growth in the womb ; in the last, by milk drawn from the breasts ; in this manner depriving the constitution of a considerable quantity of that nourishing fluid called *chyle*, which otherwise would have been changed into blood, so as to have produced the periodical discharge.

No other satisfactory reason can be assigned, why the monthly evacuation should come on at the age of maturity, and cease in the decline of life ; or even why it did not appear in the infant state, and continue periodically ever after to extreme old age ; seeing that the structure of the womb, and distribution of its vessels are nearly alike in both. It has, indeed, been asserted, that before maturity the blood is gradually consumed by the growth of the body ; but this is too superficial a reason to deserve attention ; because the body continues growing long after menstruation, and in the same manner as it did before.

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46 PERIODICAL DISCHARGE.

From those circumstances, it becomes manifest, that the first appearance of the menses plainly denotes the age of maturity, and shews that the young female is in a capacity to produce her species, according to the stated law of nature; and agreeable to this observation, women have seldom been known to conceive before their commencement, or after their total cessation. When women have children at a very late, or early period, they are seldom healthy and long liv'd, but like untimely fruit, robb'd of half its nourishment, wither and die before they arrive at maturity. The same defect may be observed in the seminal principle of vegetables, the unripe seed of which will never produce vigorous plants.

In this country, the monthly discharge generally comes on about the age of fifteen, and in healthy subjects returns every twenty-eight or twenty-nine days; that is, every lunar month, till about the age of forty-five or longer; but its long or short

PERIODICAL DISCHARGE. 47

short duration through life, chiefly depends on the late or early date of its first commencement; for, in proportion to its early appearance, it goes off the sooner; and so on the contrary. It usually continues for the space of three or four days, the quantity then evacuated varying considerably in different women, according to their age, climate, difference of constitution and manner of living.

In the warm, southern climates of *France*, *Portugal* and *Italy*, I observed it commenced at a more early period; where, it is also more regular and profuse than in colder countries. In the icy regions of *Lapland*, we are told, that many women only menstruate in summer. In the first of those places they begin to breed much sooner, and are more fruitful than in the last. It has been remarked of old, that the *Scythian* women were often barren, because they had so small a quantity of the menses; and for the same reason, those of *Greenland* are seldom

48 PERIODICAL DISCHARGE.

dom very prolific ; having usually no more than two or three children, but oftener, one or two, and sometimes none at all. Hence, animal, as well as vegetable bodies, are considerably influenced by the nature of the climate in which they are produced.

Conformable to those observations, we find that women in our own country, who are *irregular* or *obstructed*, are either barren or bring forth a puny race of children ; and on the contrary, those who have a more copious and regular flow of the menses, are full breasted, and have large veins, are generally fruitful, and blest'd with a more numerous and healthy offspring.

The prudent conduct of women, at this critical juncture, when a kind of revolution or general change is brought about in the constitution, is therefore, not only of the utmost importance to their own future health, but also to their offspring ; the very production and well-being of which depend on such a state of the body as arises from the due returns

PERIODICAL DISCHARGE. 49

turns and a sufficient quantity of the periodical discharge.

The following symptoms of the approaching menses will best point out the time when such cautions are most proper and necessary. A few days before they appear, the breasts grow larger; the patient has pains in her loins, belly and thighs, with a sense of weight and fulness in the uterine region. Sometimes a giddiness of the head with retchings attend; and I have seen some instances, where hysterical symptoms with a rising in the throat also prevailed. But although, those and many other slight complaints of the like nature are troublesome to women at this period, they usually go off on the first appearance of the discharge.

When women expect to be visited with the monthly indisposition, they should avoid, as much as possible, all such causes as are known to discompose and disturb the body or mind. The belly, loins, and feet in par-

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50 PERIODICAL DISCHARGE.

ticular should be kept warm. Care should be taken not to sit in wet cloaths, or expose themselves to a stream of cold air near open doors or windows. Late hours, anxiety of mind, or the extremes of anger and sudden fear, are also highly pernicious.

Their food should be simple, and rather of the fluid, than solid kind. They should abstain from cold liquors, acids and unripe fruits; and therefore, iced-water, austere cyder, port, rhenish or other wines, of an astringent quality, are to be avoided as improper.

If some, at this time, are so happy as to perceive very little alteration from a state of perfect health, notwithstanding their neglect of such salutary rules and cautions; it may be truly said, they are more indebted to the strength of a good constitution, than to their own prudent conduct; the want of which has often laid the foundation of incurable diseases, and in the end deprived the patient of life.

For

PERIODICAL DISCHARGE. 51

For such as menstruate with pain and difficulty, it will be proper gently to open the body by *Magnesia*; and afterwards to take one of the *Anodyne Pills*, no. 1. every night, or oftener if necessary, and to keep in bed till the symptoms of violence are over.

So great and remarkable is the change produced in the female habit, towards the first commencement of the menses; that many obstinate and long-continued disorders have been then known to abate or totally disappear; especially *Convulsions* and the *King's Evil*; altho' they had before resisted the efficacy of the most powerful medicines. Hence it appears, that this is the proper season to aid the powerful efforts of nature, by the timely assistance of art; a circumstance of the utmost consequence to the patient's future welfare, tho' generally overlooked or disregarded.

Was this favourable opportunity duly attended to, and proper medicines directed; I have no doubt, but those, and other

52 PERIODICAL DISCHARGE.

diseases of the like nature, might often be effectually removed; which, by neglect, and length of time become so diffused thro' the blood, and interwoven with the constitution, as to continue during life, without the possibility of a cure.

The menstrual discharge is not sanious or malignant, as many have supposed, but a sanguineous fluid, equally pure with that circulating in the blood-vessels; otherwise it would have been very unfit to nourish the child in the womb; whose body is, as it were, built up by the redundant blood retained in the mother's constitution, during pregnancy, for that special purpose.

Women need not, therefore, look upon this critical evacuation, as the monthly task of nature, to purify the blood from something malignant or poisonous; but only consider it as an expedient to prevent a *Plethora*, or overfulness of the vessels; which will be more particularly considered in the next section.

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This error of the ancients seems to have taken rise from a passage in the *Mosaic Law*, forbidding all commerce between the two sexes till after the purification of women, by ablution or bathing; a custom which still prevails among the jewish and eastern women; and, inasmuch as it is founded in delicacy and contributes to health, deserves the imitation of women in general, however distinguished by country or religion. In this particular the *Italian* ladies, who first introduced the *Biddeau*, deserve the highest commendation.

From the relation of travellers, who tell us, that among the savage women of *Topinambos* and those of *Tapnias* in the *Brazils*, the menses are almost totally wanting; some have too hastily concluded that this discharge does not necessarily arise from the institution of nature, but rather is the effect of luxury and excess, prevailing in the more civilized parts of *Europe*, which perverts and changes the original state of the constitution.

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54 PERIODICAL DISCHARGE.

But we need only take a review of the particulars already advanced, to shew the fallacy of this opinion, and to prove, that in the human subject, at least, it is essential to the female constitution, and necessary towards the production of her species.

If some women are to be found, who are destitute of this natural benefit, and yet enjoy health, such may properly be called *Virago's*, as partaking of the temperament and disposition of men; barren, and bold, they are endowed with masculine feelings, and little susceptible of that tender partiality which mutually influences the two sexes, and endears them to each other with more than magic power; which softens and harmonizes the passions of the one, and renders the other lovely and irresistibly pleasing.

SECTION

S E C T I O N II.

Of the Periodical Discharge in a diseased state; namely, when irregular, obstructed, or immoderate in quantity.

AS the regularity of the menses indicates the natural state of the female constitution and is essential to health; so the obstruction or excess of that discharge powerfully disposes the body to Diseases of the *Chronic Kind*; which will be treated of in the present section.

Where it so happens, that the constitution abounds with blood, before the vessels of the womb are sufficiently enlarged to allow of its passing off that way; a disease, peculiar to virgins, called *Chlorosis* or green-sickness, is said to be produced; and this usually appears about the age of maturity, where the efforts of nature are too feeble to bring on the menses in due season.

When this discharge has been regular for a considerable time, and at length, from any
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56 PERIODICAL DISCHARGE.

accidental cause, returns by longer intervals, or more sparingly than usual; it is said to be irregular or partially obstructed; but if it does not return at all, it is then called a total suppression of the menses: So that those several complaints, however different in degree, all arise from the same cause; that is, from retained menstruous blood, which is supposed to vitiate the whole mass, and render it unfit for circulation and the purposes of life.

But altho' this has been the general opinion; many reasons may be brought to prove, that the blood, so retained, rather *offends in quantity* than quality; and that the bad effects are chiefly owing to the violent stress laid on the several vessels, in consequence of their being overfill'd, which clogs and impairs their circulating power, and prevents that free and easy distribution of blood to different parts of the habit, which is necessary to a state of health.

From the disorders brought on by obstructed perspiration; a sudden stoppage of the
bleeding

bleeding piles, or even the omission of blood-letting, to which the patient had been accustomed at particular seasons of the year; and where the blood evacuated, in the last instance, is equally pure with that remaining in the vessels; there is sufficient reason to believe, that the menses, when obstructed, only affect the constitution, by overloading and weakening the vascular system of the body, and not by imparting any poisonous quality to its several humours.

An influence, malignant as that of the *Dog-Star*, absurdly and unworthily imputed to women at this period, viz. of stopping the fermentation of liquors, and killing vegetables by the slightest touch, with such like fabulous relations, ought therefore to be rejected as *vulgar Errors*; the offspring of ignorance and superstition, equally inconsistent with reason and truth.

On the contrary, I have already remark'd, that whatever happens to women, at this time, is perfectly agreeable to nature's law;

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and

58 PERIODICAL DISCHARGE.

and where it is interrupted by any defect in the discharge, they are, from thence, not only deprived of the delicacy peculiar to their sex, but also of health itself; together with the pleasing hope of beholding a beautiful and blooming offspring, like “olive branches, “round about their table.”

The cause of green-sickness is not, however, solely confined to an obstruction or want of the menses; for, virgins are sometimes subject to it at a very tender age, long before any superfluous blood could naturally be collected in the habit; besides, if it were entirely owing to a defect of the natural discharge, the several symptoms would immediately disappear at its first commencement; which is not always the case.

This particular species of the disease, seems therefore to arise from constitutional weakness, or a general want of power in the bodily organs to perform their natural office. The digestive faculty of the stomach is impaired, and consequently, the juices derived
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from the food being crude and watery, are insufficient to nourish and supply the body: Hence, the heart, which is the principal instrument of circulation, can hardly drive forward the blood in its vessels, or distribute that vital fluid to different parts of the body; without which, like a plant deprived water, it will languish and die.

In such a state, neither health or strength can long subsist, nor can the several necessary evacuations of perspiration, urine or stool be promoted. From obstructed perspiration will proceed, weariness, oppression of spirits, wandering pains, and a slow fever. From costiveness, will arise, head-ache, palpitation of the heart, and a throbbing or tremulous motion of the internal parts; especially after violent motion or sudden surprize; also, indigestion, heart-burn and swelling at the stomach. And lastly, from a defect of the urinary discharge; the blood will be loaden with watery, scorbutic humours, and a bloated dropical habit of body will ensue.

60 PERIODICAL DISCHARGE.

To those prevailing symptoms of the *green-sickness*, may be added, a countenance wan and fallow, with remarkable paleness of the lips, and excessive coldness of the feet, all arising from the same cause, viz. an impoverish'd, watery blood, and the want of its free circulation. The patient's appetite is whimsical and much impair'd, often directing her to things void of nourishment and improper for her; such as chalk, cinders, sour, fruits, and the like.

From whatever cause the *green-sickness* may proceed, it is seldom attended with immediate danger; yet, where it has been improperly treated in the beginning, or too long neglected, it often lays a foundation for other diseases; and particularly disposes the patient to *barrenness*, *dropsy*, *consumption*, and *cancers* of the breast or womb, which not unfrequently put an untimely period to her life.

As young females among the lower class of people, who use sufficient exercise and
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PERIODICAL DISCHARGE. 61

enjoy the fresh, open air, are seldom visited with green-sickness; it may reasonably be presumed, that it often arises among those in a higher station of life, from the want of those common benefits; and that little more than their salutary aid is necessary for its cure.

Parents and guardians, as well as those intrusted with the important office of superintending the health and education of Young Ladies, would therefore do well to observe, and direct their conduct with more than common care and attention, at this *critical juncture*; the benefit of which may extend to the latest period of their lives; for, on the seasonable commencement and regular returns of the natural discharge depends their future health, as well as the enjoyment of every blessing derived from it. The regulation of their passions, the degree of their exercise, the quantity and quality of their food, together with the nature of the air they breathe, should therefore be regarded
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62 PERIODICAL DISCHARGE.

with the most prudent caution; as well as every other circumstance corresponding with the intention of nature, in acting conformable to her own laws.

Nothing will contribute so much to this desirable end, as chearful company, moderate exercise in fresh open air, simple food, and an undisturbed mind.

If therefore, the menses do not commence in due season, and the patient is observed to become weak, pale and sickly; she should be indulgently treated, and not by confinement and restraint, inconsiderately deprived of those innocent and reasonable amusements, so manifestly tending to the recovery of her health. On the contrary, she should be allowed to walk or ride an hour or two, every day before dinner, when the weather is fine and dry.

The power of *Music*, assisted by the influence of *Poetry* and *Painting*, apart from the hours of exercise, will administer to the mind a perpetual source of variety, elegance

PERIODICAL DISCHARGE. 63

gance and delight, suitable to its delicacy; which, by enlivening the passions, and inducing a pleasing serenity of temper, will contribute greatly in promoting the several secretions, and restoring the languid powers of the body to their natural standard of strength and vigor.

Even moderate exercise, at first, will fatigue the weak patient, and put her out of breath, and therefore becomes irksome and disagreeable; but when gradually increased, and steadily persisted in, she will daily gain strength and spirits; so that what before was a punishment, will afterwards become a pleasing amusement.

The quantity and quality of her food should also be suited to the digestive power of her stomach; for the nourishment derived from it, will not be proportioned to its quantity, but to the degree of perfection with which it is digested; and therefore, to eat often, and in small quantities, of what is light and simple, and thoroughly to masticate

64 PERIODICAL DISCHARGE.

masticate or chew it, is a circumstance of much more consequence to those who have weak stomachs than is generally imagined; for such cannot dispense with much solid food at one time, without being greatly oppressed with wind, indigestion and heart-burn.

Although the green-sickness requires a more gentle and cautious treatment, than obstructions of the menses arising from accidental causes, and is also much more tedious of cure; in general, it will yield to those gentle methods, if continued for a sufficient length of time. Should it be necessary to assist them by medicines; I have never found any thing equal to the effects of the *peruvian bark*, which may be given twice a-day, as directed at no. 2. The *Bath* and *Tunbridge*, or the *Pymont* and *Spa* Waters may also be administered: The patient should not fail to use exercise at the same time; and her feet may be bathed in warm water every night before bed-time.

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PERIODICAL DISCHARGE. 65

She should abstain from the immoderate use of *Tea*, instead of which she may drink *Coffee* with the addition of milk, and now and then weak broths. She may set up to the waist in a warm bath of water, twice or thrice a-week; particularly at those times when nature attempts to bring on the discharge; which may be known by attending to the symptoms already mentioned. This will gently relax and soften the vessels of the womb, and invite the blood to the contiguous parts.

At coming out of the bath she may be put to bed, and her skin rubbed with hot flannels, or the flesh brush. If she is restless or in pain, the small opiate pill, no. 3, may be administered. Cupping glasses may also be applied to the inside of her thighs; which I observed was practised with success among the Ladies in *Portugal*.

Where the disease is tedious, the strength much impaired, and universal relaxation of body prevails; bleeding and evacuations are

68 PERIODICAL DISCHARGE.

improper. Two of the strengthening pills, no. 4, may be given twice a-day with an infusion of orange peel, or garden tanfy; and where there is no decay of the lungs or other internal, vital parts; the cold bath will greatly assist in the cure, by bracing the solids, and repelling the blood from the surface of the body to the vessels of the womb. But the last being a remedy of the powerful kind, ought never to be directed without proper advice; as many instances have occur'd, where such as laboured under consumptive symptoms, with weak, ulcerated lungs, have suddenly been destroyed by its unseasonable use.

The common practice of giving *forcing medicines* in the early state of this disorder is dangerous and unnatural; and although it has ruin'd the health of thousands, is still followed without limitation or distinction. Thus, by the improper use of *steel*, *mercury* or *bellebore*; the blood becomes overheated, and being violently driven upon the
womb,

PERIODICAL DISCHARGE. 67

womb, whilst its vessels remain too closely contracted to allow of its passing off that way; it may exceed its natural bounds, and impelled with too much rapidity, may burst the vessels of the stomach or lungs, and occasion an habitual spitting of blood, which frequently ends in an *incurable Consumption*.

This is not a conjecture or needless apprehension, but founded on reality and the testimony of facts and observation; which the following quotation from Dr. *Mead* will clearly prove. Speaking of the singular virtues of *black bellebore* in promoting the obstructed menses, he thus expresses himself.

“ I have observed this remarkable circumstance; that whenever, either from a bad
“ conformation of the parts, or any other
“ cause, this medicine had not the desired
“ effect; the blood was forced out through
“ some other passages; which is a manifest
“ proof of the great power of this medicine
“ in spurring the blood forward.”

From such particular effects, 'tis also evident, that this medicine does not act

66 PERIODICAL DISCHARGE.

specifically on the womb alone, but that it lays an equal stress on the whole vascular system: Hence the folly of those who imagine that particular medicines have the power to procure easy child-birth, or to expel the after-burden; since it is plain, such things only produce their effect by irritating the solids, and driving the blood with more rapidity through its several canals, so as to create a temporary fever, thirst, head-ach, and even a rupture of its vessels.

By such destructive violence done to the constitution, the gentle progress of nature is interrupted, and the menses, instead of passing off by the womb, will continue to deviate and flow by unnatural passages, producing a hectic or flow fever, wasting of the body, and inward decay.

Lastly, *forcing medicines* ought never to be given when it is doubtful whether a woman is with child or not; to nurses who give suck, or to those at the age of forty-five or fifty, although they sometimes in-
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PERIODICAL DISCHARGE. 69

considerately desire it; not being able, without reluctance, to perceive this infallible sign of advanced age.

In young subjects, the monthly discharge is generally, at first, irregular; not only returning at undue periods, but being pale and small in quantity; it has, therefore, at such times, been mistaken for the *Fluor Albus*, or female weakness. This is owing to the firm and compact state of the womb, its vessels not being yet sufficiently dilated to allow of a more plentiful discharge; but as they yield and become larger; the quantity will increase by degrees, and its colour be render'd more fresh and florid at each returning period; till at last, their appearance, in all respects, will be perfectly natural.

It may here be remarked, that nature accomplishes her designs by slow and insensible degrees, and consequently, without violence to the constitution; for the uterine vessels are not suddenly torn open by the rapidity

70 PERIODICAL DISCHARGE.

rapidity of the circulating blood, as when *forcing medicines* have been imprudently given; but on the contrary, will gradually yield and give way to its gentle pressure, without pain or inflammation of that tender organ.

As the danger of stopping a discharge strictly natural must be obvious; it is necessary to distinguish the *first menses* from a *female weakness*, which may be done by attending to the following circumstances. The first, though almost colourless, and small in quantity, generally return once a month, attended with the usual symptoms of the menses; whereas, a female weakness continues without intermission, accompanied with pains in the loins, faintness, and other signs of bodily weakness.

Although women, after having children, become more regular than before; the menses, even then, may sometimes happen to be obstructed from accidental causes; as irregularity of the passions, taking cold, errors in diet, a thick sily blood, or too much firmness of the uterine vessels.

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A consumptive habit attended with *night sweats* and an habitual diarrhœa or purging; the bleeding piles, or a female weakness, may likewise occasion a deficiency of the monthly discharge, by over-draining the body, and lessening the quantity and circulating power of the blood.

The symptoms following an obstruction of the menses are, heat and throbbing in the loins, pain and giddiness of the head, swelling of the throat, palpitation of the heart, and difficulty of breathing. A loathing of food with sickness at stomach and indigestion, the night-mare, with pinchings in the bowels, frequently attend. The patient is subject to low spirits, faintings or hysteric fits; and where a total and long continued suppression prevails; the legs usually begin to swell; the countenance becomes bloated, and at length those complicated symptoms terminate in a *Dropsy*, *Consumption*, or some other lingering disease equally fatal.

Here it will be necessary to distinguish the symptoms of the obstructed menses from those

72 PERIODICAL DISCHARGE.

those consequent of conception, which, without due caution, might easily be mistaken for each other.

If a healthy married woman, who before had usually been regular, misses the monthly discharge without any manifest cause, as a sudden surprize, catching cold; or errors in diet; she may then be concluded with child; especially if affected with sickness and retchings in the morning when she first rises from bed.

But the most certain, general rule of forming a true judgment of such doubtful cases will be, to observe whether the patient grows better or worse by length of time; for, those complaints which happen from conception generally go off after the fourth month; whereas, those arising from obstruction gradually become worse, from the retained menstruous blood which over-strains the vessels and weakens the constitution.

It is very extraordinary that before the age of maturity, the womb seems totally
unaffected

unaffected by injuries done to the body or mind; yet afterwards, especially at the approach of the menses, discovers the most exquisite and uncommon degree of sensibility, as well as the whole nervous system; insomuch, that a sudden fright, improper diet, or even a drop of cold water unexpectedly falling on the body, will disturb the whole frame and hinder their return.

The intention of cure will always vary according to the nature of the causes which produce the obstruction; so that what would be serviceable to one, might prove extremely hurtful to another. If it arises from a fizy blood, or too much strength of the uterine vessels, which may be known from the fulness and hardness of the pulse; bleeding in the foot or arm will be necessary, with such medicines as relax the solids, and render the blood more fluid. Spare diet, and the plentiful use of new milk whey, with nitre or crystals of tartar; laxative clysters made with a decoction of mallow-

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74 PERIODICAL DISCHARGE.

leaves and soap; the warm bath or steams of hot water, over which the patient may be placed; all conduce to that end.

If the menses are obstructed from a fright, anxiety of mind, or taking cold; *bleeding* and the *warm bath* will be proper; and afterwards the opiate mixture, may be given as directed at no. 5. Those will be most likely to answer the intention of cure, by soothing the nerves, and relaxing the contracted uterine vessels.

Where the disorder is of long continuance, and the habit of body strong, it may be necessary to bleed in the foot; to use the warm bath the next evening, and to give the gentle antimonial vomit, no. 6, immediately after. Warm purging medicines with *aloes* may then be given; and lastly, the spices with bitters and steel. She may take two of the pills, no. 7, night and morning, with a glass of Pyrmont, Spa, or Tunbridge water, after each dose; and at the same time use moderate exercise, which will powerfully assist the efficacy of such medicines.

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PERIODICAL DISCHARGE. 75

It appears strange that the same cause which puts a stop to the periodical discharge in one person, should bring it on immoderately in another, and before the natural time; but this seems to happen according to the strength or weakness of the constitution, and to the various degrees of nervous feeling, peculiar to different women.

Before we dismiss this subject, it is necessary to caution the patient against a very dangerous and prevailing error in attempting the cure of the obstructed menses. It has been the general opinion of women, that *an obstruction of the menses is the sole cause of ill health*. In consequence of this general mistake, Nature has been attacked with those instruments of violence, *forcing medicines*, which thus indiscriminately and preposterously applied, have destroyed more constitutions than the disease itself.

Observation and experience clearly present us with the following facts, viz. an ill state of health, to which women are sub-

76 PERIODICAL DISCHARGE.

from causes in common with men, will frequently bring on an obstruction of the menses; but if health can be restored; this evacuation, like others natural to the body, will again return without much assistance from medicines. Hence it is evident, that the effect has been mistaken for the cause, and the cause for the effect, to the great injury of the female constitution.

A diseased state of the body will often render its natural discharges deficient, or excessive; just so it is with the menses when the patient is sickly; and where nothing can restore them to their wonted regularity, till the constitution returns to its natural standard of health and vigour.

When an obstruction happens in consequence of taking cold, a surprise, or any other apparent cause; then indeed, if the health which before was perfect, immediately begins to suffer; such a change must be imputed to the obstruction, and proper means should be used to remove it; but, of
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PERIODICAL DISCHARGE. 77

the many cases which have come under my care; at least two thirds of them proceeded from *declining health*, occasioned by anxiety of mind, diseases of the womb, or some particular fault of the constitution.

In such, therefore, where the menses are deficient from long continued illness, or a consumptive tendency, accompanied with an habitual purging or night sweats; *forcing medicines* can never be given without the highest injury to the patient; who, is then nearly in the same condition as a nurse who gives suck, or a woman with child; for, under those circumstances, where the body is exhausted, and the blood rather deficient than abounding, 'tis no wonder the discharge should be wanting.

Here, those things will be most proper, which enrich the blood, increase its quantity, and restore, if possible, the decayed constitution to its natural state. Moderate exercise, in a clear dry air, simple food, with
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78 PERIODICAL DISCHARGE.

ass's milk, goat's whey, or a decoction of sarsaparilla, and the Peruvian bark will contribute to that end. Bristol water for common drink, may also be taken to advantage, as approaching near to a pure elemental fluid, although, in other respects, void of every medicinal quality.

It is also necessary to caution the patient against the danger of *astringent medicines* to stop the menstrual discharge when it unexpectedly continues for the two or three first months of pregnancy; for this happens in consequence of abounding blood, which the child, from its exceeding smallness, is not as yet able to consume, and therefore the evacuation is a relief to the constitution. In such particular cases, if affected with pain, or fever, she should lose two or three ounces of blood from the arm, once in a fortnight or three weeks, and use a spare, cooling diet. She should breathe a cool air; eat ripe fruits, which will keep her laxative, and avoid violent exercise and anxiety of mind.

Every

PERIODICAL DISCHARGE. 79

Every deviation from a natural state of the body is alike injurious to health; and as we have seen the bad consequences of obstructed menses; so an *immoderate quantity of that discharge* is productive of many diseases, more sudden in their effect, and dangerous in their event than the former; and to which it will next be requisite to pay attention.

The menses are always to be considered too large in quantity, when instead of rendering the patient brisk and lively; they leave her with languor and sensible loss of strength.

An excess of this discharge may proceed from weakness of the uterine vessels; a sharp, thin, blood, or any cause which preternaturally increases its motion, and forces it with violence to the womb. Anger, immoderate exercise in hot weather, the use of mercury, or spirituous liquors will produce this effect. A scorbutic habit of body, or a slow, hectic fever will likewise dispose the patient to this disorder; and sometimes, I have known large quantities of
blood

86 PERIODICAL DISCHARGE.

blood escape from spongy tumors, or an ulcer of the womb.

The natural quantity of the menses is so very different, in different women, that it can never be more truly known than by observing the symptoms with which it is attended. For altho' it should appear profuse; if not followed by faintness or loss of strength, it ought to be deem'd perfectly natural; and no medicines or methods should, in future, be used either to stop or restrain it; In short, the danger should not be estimated by the quantity of the evacuation, but the symptoms which attend it.

Women of delicate constitutions, weak nerves, and great sensibility, are, of all others, the most subject to a profusion of the menses; particularly those who have had many children and lead a sedentary life. In such, they generally return too frequently, and continue too long, so as greatly to exhaust the patient's strength and render the disorder difficult of cure; especially, if she happens to labour under a scorbutic habit of body; the
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PERIODICAL DISCHARGE. 81

king's evil, a venereal taint, or any other hereditary disorder, which destroys the balsamic quality of the blood, and preys upon the constitution.

Heat and moisture, warm baths, dancing, or violent agitation of the body or mind dispose to an immoderate discharge of the menses; also the use of mercury, steel or tincture of hellibore. Lying in bed to excess, especially on those too soft, is also pernicious. The patient should sleep on hair mattresses, in a cool, airy bed-chamber, and avoid all conjugal intercourse.

The immoderate menses occasion faintness, loss of appetite and digestion, nervous tremblings, dejection of spirits; and, if not remedied in due time, a *dropfy*, or *consumption*. I have known several cases of this kind which proved fatal by being neglected: Those in particular which arise from a fright, or diseases of the womb, in the decline of life, are generally the most dangerous and difficult of cure.

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82 PERIODICAL DISCHARGE.

In such disorders, those things which give strength to the solids, and balsam to the blood, with rest of body and mind, bid fairest to produce a cure. This purpose may be effected, by breathing a pure, cool air, by light and simple food of the nourishing kind, taken often and in small quantities; and by administering, twice a day, the most powerful of all medicines, an infusion of the peruvian bark, prepared as at no. 8.

The patient may live chiefly on white meats roasted, or nourishing broths, with sorrel or other acceffant vegetables. Shell fish, jellies, afs's milk or chocolate are also proper; and should a cordial, at any time become necessary; tent wine, claret, or rhenish with cinnamon may be given; but the hotter spices, and all those things which are salt, high seasoned, or spirituous, are to be avoided as pernicious.

Where the discharge is excessive; thick compresses of soft linen, dipp'd in vinegar and water, should be applied to the belly and
loins,

PERIODICAL DISCHARGE. 83

loins, and renewed as soon as they grow warm. The injection no. 9, may also be used twice a day. But should this complaint turn out uncommonly obstinate, attended with symptoms of danger; it will then be most prudent to consult a physician conversant with such disorders; as *barrenness*, a *dropsy*, or *consumption* have often been the consequence of delay or improper treatment.

By due attention to these rules and cautions, many women might be restored to perfect health, who, either from *indolence*, *false delicacy*, or a *mistaken conformity* to vulgar prejudices, in opposition to nature; have fallen victims in the bloom of youth, and been brought to an untimely grave.

§4 PERIODICAL DISCHARGE.

S E C T I O N III.

Cessation of the Periodical Discharge in the decline of life, and the disorders arising from that critical change of the constitution.

SO long as the prime of life continues, together with that extraordinary natural faculty of preparing redundant blood for the service of the child; so long its circulating force will be more than equal to the slender resistance of the uterine vessels, and the menses will continue to flow; but when they become so firm and strong, from the effect of age, that the current of blood, now diminished in quantity, is insufficient to force them open; then the periodical discharge will totally cease.

At this time, the female constitution is in a state, the very reverse of what happened to it at maturity, when the discharge first appeared; so that the circulating force of the blood and resisting power of its vessels, may be simply considered as an unequal ballance
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PERIODICAL DISCHARGE. 85

to each other, at different periods of life; producing those two natural changes in the body, which bring on the menses at maturity, and carry them off in advanced age, as the one or other alternately prevail.

The mass of blood being the source from which the periodical discharge is derived; and, from that failure of appetite and digestion which prevails in advanced age; it will then gradually become less copious; so that, the monthly returns will be more irregular, both as to quantity, and the time of their duration.

Thus the tide of nature being turned, and as it were on the ebb; this long accustomed evacuation will entirely cease; and with it the faculty of having children. Hence, from a dissipation of the blood and juices, and the consequent emptiness, and rigidity of their vessels, they will gradually shrink up and contract; so that instead of the wonted freshness and smoothness of the skin when replete with moisture; age, and wrinkles, those unwelcome intruders, will come at last.

At

86 PERIODICAL DISCHARGE.

At this *critical time of life*, the female sex are often visited with various diseases of the *chronic kind*: I have observed, *more women die about this age*, than at any other period, during the years of maturity; for, as many constitutional infirmities, or hereditary disorders were relieved by the first approach of the menses; so they often return at the cessation of that discharge. If, for instance, the patient had naturally weak lungs, pains at her stomach, headache, or complaints in the breast or bowels *inclining her to a Consumption*; she will probably, now again, be attacked with those disorders more violently than ever.

Several, indeed, who have lived temperately, and are naturally very healthy, escape without much inconvenience; and I have known some delicate women inclined to *hysterics*, and nervous disorders, who were relieved by this change, and became much more strong and healthy than before; whilst others, on
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PERIODICAL DISCHARGE. 87

the contrary, of a sanguine constitution, who used little exercise, and indulged their appetites to excess, often suffered severely at this juncture, particularly when bleeding and evacuations had been neglected.

Some are subject to pain and giddiness of the head, hysteric disorders, colic pains, and a female weakness. The bleeding piles, a stranguary, and intolerable itching at the neck of the bladder and contiguous parts, are often very troublesome to others. The rheumatism and scurvy, attended by their several symptoms, viz. pains in the limbs, ulcers in the legs, and eruptions on the skin, at this time frequently appear; also obstructions of the glands, with the most grievous and distressing of all human maladies, *cancerous tumors* of the breast and womb.

Women are likewise sometimes affected with low spirits and melancholy; which, together with the principal disorders already mentioned, will hereafter be particularly considered under their *proper titles*. It will now be sufficient

88 PERIODICAL DISCHARGE.

sufficient to point out, in a general way, those methods which have been found most successful in affording relief at this critical juncture; on a due attention to which, their future health greatly depends.

Perhaps it may appear extraordinary that so many disorders should happen from a change so usual with every female; but it would be unreasonable to expect that nature should always be obedient to her own laws, when they are so often interrupted and transgressed from the many excesses introduced by luxury, and the irregularity of the passions.

To such causes, many diseases, peculiar to the human species, are certainly owing; from which, quadrupeds and other animals are entirely exempt, by living conformable to their own natural feelings; uninfluenced, by erring reason, or the tyranny and prevalence of pernicious customs.

The several disorders consequent of obstructed menses have been enumerated; and
from

PERIODICAL DISCHARGE. 89

from the most attentive observation it appears, that many complaints imputed to the cessation of that discharge, are, in reality owing to its obstruction. For instance; it sometimes happens, that in particular constitutions, the vessels of the womb become contracted and their orifices closely shut up, too early, in the decline of life; whilst the faculty of preparing redundant blood still continues; so that the same symptoms will ensue, as those which happen, from an obstruction, at any other period. The relief procured by bleeding and evacuations, in such cases, shew the propriety of this observation. Hence, it will be necessary to distinguish the difference between a *natural cessation* of the menses, and a real, *untimely stoppage* of that discharge, for which it has often been mistaken.

Considering how liable women are to obstructions, at all seasons, from a variety of causes, it can be no wonder the same inconvenience should happen at this time; when

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90 PERIODICAL DISCHARGE

a natural tendency, from advancing age, concurs to render such causes more powerful in their effects.

Should this particular species of obstruction prevail; it does not appear adviseable to use violent means, so late in life, with a view to bring back the discharge; but only to carry off the accumulated, superfluous blood, by bleeding, and gentle purgatives; to direct an abstemious diet, with gentle exercise, and leave the rest to nature.

In women of bad constitutions, who become irregular in the decline of life, and menstruate a longer time than ordinary; large clots of blood are, sometimes, forced away with great pain and a bearing down. Such cases almost certainly indicate a diseased womb, and if neglected or improperly treated, often degenerate into a *cancer* or *ulceration* of that part; especially, where the putrid and offensive discharge has suddenly been stopped by astringents; and where bleeding and evacuations, with such medicines as
sweeten

PERIODICAL DISCHARGE. 91

sweeten the blood, and bring it to a more balsamic state, had previously been neglected.

Where there is much pain and a slow fever, the patient should first be bled; she may then take the gentle purging draught, no. 10, once a week, and during the intervals, half a pint of the decoction, no. 11, night and morning. She should live on spare and simple diet, and drink *Seltzer*, *Aston*, or *imperial water*, instead of malt liquors.

By such methods, it will be more safe and proper, rather to prevent the increase of blood, than to lock it up by astringent medicines, when so collected; for although it has been remarked, that menstruous blood is not impure; yet, by stagnating too long in the vessels of the womb, or its contiguous parts, it may acquire pernicious qualities; and being taken back into the circulation, may prove hurtful to the constitution.

The *urine* and *gall* which were both separated and strained off from the blood,

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92 PERIODICAL DISCHARGE.

are in their natural state perfectly innocent; yet by being lodged too long in their receptacles, or again infused into the general mass, will occasion diseases and death: Even simple water by confinement or *stagnation* will become unwholesome and corrupt. Just so the animal fluids retain their natural qualities, whilst in a due state of circulation; but become vitiated and depraved, by remaining too long at rest.

To assist the constitution in dispensing with that *critical change* which happens at the cessation of the menses, and to compensate for the want of that long accustomed discharge; bleeding once a month, more or less copiously, as occasion may require, with the use of the purging draught, no. 12, during the intervals, will be necessary; and may be continued a considerable time with great safety and advantage; especially in strong habits of body, where the blood abounds.

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PERIODICAL DISCHARGE. 93

The patient should now lessen the usual quantity of her animal food, and live on a more spare and simple diet, chiefly consisting of vegetables, fish, and spoon meats. She should abstain from malt liquors, and drink any of the light thin white wines diluted with water, or toast and water only. Her exercise should be increased, which will assist perspiration; and if she is costive, and the quantity of her urine small, attended with thirst and a slow fever; the cooling ptisan, no. 13, taken occasionally, will remedy both those inconveniences.

A contrary method should be used where the patient is delicate and subject to a female weakness, night sweats, or an habitual purging, with flushings in the face and a hectic fever: For such; ass's milk, jellies, and raw eggs, with cooling fruits will be proper. At meals she may be indulged with half a pint of old, clear London porter, or a glass of rhenish wine. Twice a day she may take a tea-cup full of the restorative

94 PERIODICAL DISCHARGE.

storative infusion, at no. 14; and when her strength is increased, if her lungs and vital parts are sound, she may venture on sea-bathing, or the cold bath, with great advantage.

Should the *bleeding piles* appear at this juncture; ulcerous sores break out in the legs, or eruptions on the skin; the first ought not to be restrained, or the last repelled or dried up; for those discharges, under such circumstances, are, generally critical; and I have observed, that where they were suddenly suppressed; an *acute rheumatism*, *hysterics*, *convulsions*, and even death itself, have sometimes been the consequence.

CHAP.

C H A P. II.

*Diseases of the Womb and its contiguous Parts ;
their Treatment, and Method of Cure.*

SECTION IV.

*Of the Fluor Albus, or Female Weakness ; and
how distinguished from a Venereal Infection.*

THE Fluor Albus, female weakness, or whites, as commonly called, is a disease of the womb and its contiguous parts ; from which a pale colour'd, greenish, or yellow fluid is discharged, attended with loss of strength, pain in the loins, bad digestion, and a wan, sickly aspect.

The quantity, colour, and consistence of the discharge chiefly depend upon the time of its duration, the patient's habit of body,
and

and the nature of the cause by which it was produced. Taking cold, strong liquors, immoderate heat and moisture, or violent exercise, are all observed to produce a bad effect, as to its quantity and quality.

Weakly women of lax solids, who have had many children, and long laboured under ill health, are, of all others, the most subject to this disagreeable disease; from which they unfortunately suffer more severe penance than others; as the nicest sensations are often connected with such a delicacy of bodily frame as subjects them to it.

In *Holland*, it is very frequent, and in a manner peculiar to the place from the dampness of its situation; the surrounding air being so overcharged with moisture, as to relax the body, stop perspiration, and throw it upon the bowels, or womb; producing in the first, a *diarrhæa* or flux; in the last, the *fluor albus* or female weakness.

The discharge proceeds from the vessels subservient to menstruation; because, in
delicate

delicate habits, where those vessels are weak, and consequently remain too long uncontracted; the *fluor albus* sometimes immediately follows the menses, and goes off by degrees as they gradually close. It also comes from the *mucous glands* of the womb, as is particularly evident in very young females of eight or ten years old; in whom, though very rarely, I have observed it, and where it must then necessarily have escaped from those parts; for, the uterine vessels are not sufficiently enlarged for its passage at so early a period.

Sometimes, as in women with child, it proceeds from the passage to the womb, and not from the womb itself; which, during pregnancy, is closely sealed up, so that nothing can pass from thence till the time of labour. The application of those instruments called *Pessaries*, from the pain and irritation they occasion, are also apt to bring on this discharge. Hence we may conclude, that this disease may happen altho'

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the blood is in a pure state. Here, the fault seems to be placed in the vessels or strainers, by which the fluids are vitiated and changed from their natural qualities.

The *fluor albus* has been supposed to supply the want of the menses ; because, where the first prevails, the last is generally either irregular, or totally wanting ; but it might more properly be said, that the presence of the fluor albus, which is a preternatural evacuation, occasions the absence of that which is natural ; as is evident from the return of the menses after the fluor albus has been taken away. Indeed, when this discharge appears about the age of thirteen or fourteen, and returns once a month, with symptoms like those of the menses ; then it may be deemed strictly natural, as observed at p. 69, and therefore, ought not to be stopped.

The fluor albus may be distinguished into two kinds. The first, arises from a simple weakness, or the relaxation of the solids, which may either be *general*, where the whole bodily system is enervated and unstrung ;

strung; or *partial*, where the womb only is thus affected, in consequence of hard labours, frequent miscarriages, a suppression, or immoderate quantity of the menses, or a sprain of the back or loins.

In the first case, the discharge being generally mild, may be safely taken away. In the second, it may proceed from a vitiated, or impure blood, where the body, from thence, is loaded with gross humors, which nature for her own security and relief thus endeavors to carry off. In such cases the discharge is often of a redish color, like that from old ulcerous sores; being sometimes so sharp as to excoriate the contiguous parts, and occasion a smarting and heat of urine.

A deep-seated, darting pain, with a forcing down, attending such a discharge, is a very dangerous and alarming sign, and indicates an *ulceration* or *cancerous* state of the womb. This malignant state of the disease, if of long continuance, is extremely difficult of cure, and disposes the patient to *barren-*

ness, a bearing down, the dropsy, or a consumption.

The causes of those two kinds of this disease being different, so they will require a very different method of cure. To answer this intention; in the first case, nothing will be more proper than nourishing simple food, such as veal broths, jellies, fresh eggs, and milk diet. The acid fruits will also be proper, and the patient may take a tea-cup full of the restorative, strengthening infusion, no. 15, twice a-day, which will give firmness to the body, and assist the weakened fibres of the womb in returning to their natural state.

The same method may be used with success, where the fluor albus follows the menses, as already observed.

The Tunbridge or Spa waters may be drank at the same time, and if necessary, an infusion of green tea, or pure smith's forge water may be used with a womb syringe as an injection twice a-day. Should the disease prove uncommonly obstinate; the
patient

patient may go into the cold bath every other day; and also drink lime water with milk, which will expedite the cure, and prevent a relapse. The volatile liniment, no. 16, and afterwards the strengthening plaster, no. 17, may be applied to the small of the back.

By way of caution; she should abstain from the immoderate use of that relaxing fluid, Tea; and be removed into a dry, clear air; or if she is obliged to remain in one less proper, she may apply the flesh brush, and wear a flannel shift next her skin, impregnated with the fumes of burning frankincense, or any of the grateful, aromatic gums. Cold spring water pumped on the loins, or a blistering plaster applied to the bottom of the spine or back, are both very powerful in their effects, and have sometimes succeeded after other remedies had been tried in vain.

In the second sort of the disease, where the discharge is sharp, and of long stand-

ing; it would be extremely dangerous to suppress it suddenly, either by astringents internally taken, or applied as injections, until the blood is freed from its impurities by proper purgatives, and otherwise corrected by such medicines, as not only carry off the sharp, scorbutic salts and putrid juices, but also impart to it that soft, balmy quality of which it had been deprived.

The purging potion, no. 18, may be taken twice a-week, and in the intervals, one of the alterative *pills*, no. 19, night and morning. After this course has been continued a fortnight or three weeks, she may begin with the strengthening, bitter infusion, no. 19, in the quantity of a tea cupful twice a-day, or more, as her stomach will allow.

The same sort of food and regimen will here be proper as in the first kind of the disease. The patient should abstain from malt liquors, and drink rice water, in each pint of which half an ounce of gum arabic has been dissolved; or if she is weak, and of a cold, bloated habit

habit of body, a little French brandy may be added occasionally.

When she begins to take the bitter infusion, it will be proper to use the *Tunbridge*, or *Pyrmont* water for common drink; but if those cannot conveniently be had, the *artificial Spa water*, impregnated with iron and fixed air, as directed by Dr. *Priestly*, will make an excellent substitute, and may be had of the Apothecaries. If it should render her costive, and occasion the head-ache; she may desist, and drink imperial water or a little Sena tea, sweetened with manna, till those complaints are removed.

In short, as this is a malady of the most disagreeable kind, which, by long continuance or neglect, becomes difficult of cure, and often produces an *ulceration of the womb*, *bearing down*, *barrenness*, a *dropsy*, or *consumption*; it were to be wished, that women, on such occasions, would be more attentive to their own safety, by using all possible means, in due time, to prevent those disorders.

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I have attended more patients labouring under the *fluor albus* in the *autumn* than at any other season of the year; especially, when the weather was uncommonly moist and cold: Most of them were cured by change of diet, an increased perspiration, and the proper use of peruvian bark with aromatics. I observed that several about this time who escaped the disorder, were visited with bad colds; a defluxion of rheum on the throat, or a diarrhœa, which were removed by a similar treatment.

As women are sometimes connected with those who do not conscientiously regard their safety; it is a circumstance of the utmost consequence *to distinguish a fresh venereal infection from the fluor albus or whites*; for, if the *first* is mistaken for the *last*, and is either neglected or treated accordingly, the disorder may unfortunately end in a confirmed *lues* or pox.

The following signs will best inform the patient whether there is occasion for her doubts or not.

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A fresh infection, called *gonorrhœa*, is malignant and inflammatory; the *fluor albus* most commonly arises from relaxation and bodily weakness; and therefore, the remedies proper in the first disorder would render the last more violent, by locking up and confining the *infectious matter*.

In the gonorrhœa, the discharge chiefly proceeds from the parts contiguous to the urinary passage, and continues whilst the menses flow; but in the fluor albus, it is supplied from the cavity of the womb and its passage, and then the menses are seldom regular.

In the gonorrhœa; an itching, inflammation, and heat of urine, are the fore-runners of the discharge; the orifice of the urinary passage is prominent and painful, and the patient is affected with a frequent irritation to make water. In the fluor albus; pains in the loins, and loss of strength, attend the discharge; and if any inflammation or heat of urine follow, they happen in a less degree,

and only after a long continuance of the discharge, which becoming sharp and acrimonious, excoriates the surrounding parts.

In the gonorrhœa, the discharge suddenly appears without any evident cause; but in the fluor albus, it comes on more slowly, and is often produced by irregularities of the menses, frequent abortion, sprains, or long continued illness.

In the gonorrhœa, the discharge is greenish or yellow, less in quantity, and *not attended with the same symptoms of weakness*. In the fluor albus, it is also often of the same color, especially in bad habits of body, and after long continuance; but is usually more offensive, and redundant in quantity.

I have here purposely omitted the mention of particular medicines applicable to the cure of the gonorrhœa, as it would be unsafe for the patient to trust her own judgment in a case of so much importance to her constitution.

SECTION

S E C T I O N V.

Of a Schirrus, Cancer, or an Ulcer of the Womb; and of diseased Tumors of that Organ.

A Schirrus is a hard tumor, or swelling, generally seated in the glandular parts of the body, as the breasts, neck, or womb.

It may be occasioned by a blow, or any external violence done to the affected part; the unseasonable suppression of some long accustomed discharge; unwholesome diet; the unfavourable crisis of a fever, or any other cause which destroys the natural office of the gland; so that the fluid which ought to pass freely through it is obstructed, and there remaining closely locked up, becomes a thick, glutinous humor.

A schirrus may also arise from scrophulous or venereal taints, or a preceding inflam-

mation. Spirituous applications used for repelling milk from the breasts ; injuries of the womb received by hard labours, or the violent extraction of the after-burden may likewise be productive of that complaint.

A schirrus tumor is generally small in its beginning, and remains indolent for a time, without pain or apparent danger ; but being irritated or disturbed by any of the causes already mentioned, and by which it was originally produced, it is then liable to become painful and inflamed ; and, gradually growing larger and more irregular in figure, at last is affected with burning heat and lancinating pains ; the veins proceeding from it being much swelled, and of a blackish, or deep blue color, somewhat resembling the claws of a crab-fish, is from thence called a *Cancer*, which implies a crab.

Every schirrus, when painful or inflamed, is apt to become malignant and degenerate into a cancer ; and this fatal change is most to be dreaded at the age of forty-five, or about

about the cessation of the menses; particularly in women of bad habits of body, who have been irregular or obstructed.

The intemperate use of spirituous liquors; the violent impression of anger, or the more slow effects of melancholy, and continual anxiety of mind, all powerfully dispose the patient to *schirrous* or *cancerous tumors*; and therefore, old maids, nuns, or those who are inactive, and lead a solitary, unsociable, and discontented life, have been observed particularly subject to such diseases.

When a schirrous tumor is irritated, and begins to itch and grow red, with pain and inflammation, the confined, noxious humor being then heated and disturbed, is changed into a dangerous *animal poison*; which, having broke from its inclosure and made its way through the skin, corrodes the contiguous parts like *aqua fortis*, and forms an ulcerated, running sore, or *open cancer*. So that the same cause which changes a schirrus into
a cancer,

a cancer, may convert a concealed cancer into one which is open or ulcerated.

When the mass of blood, the very fountain from which both life and health proceed, is unfortunately tainted and corrupted with this *poisonous fluid*, the whole constitution is rendered sickly and diseased, and the cancerous matter frequently fixes upon some other glandular part; so that what was at first only local, now becomes a universal disease, and like a pestilential blight, overspreads and lays waste the whole bodily frame,

Hence, a *slow fever* attended with *night sweats*, an *habitual purging*, *pain*, and *want of rest* alternately consume the patient's strength. Clots of corrupt blood are often discharged with excessive pain and forcing down, and sometimes fluid blood in large quantities, escapes from the vessels, corroded and eaten away by the extreme sharpness of the cancerous humor.

Thus reduced to the extremest weakness, and destitute of hope, she lives in a long continued

continued state of exquisite misery, a prey to this cruel and tormenting disease; till death's benumbing opium composes her to final rest, and at once puts a period to her life and sufferings.

As no certain and infallible cure is yet known for a *confirmed, ulcerated cancer*, which inevitably destroys the constitution by vitiating the blood; the early extirpation of all such scirrhus tumors as are moveable under the skin, and unconnected to any considerable nerve or blood vessel, is a practice which can never be too much recommended; even were they may appear void of pain or danger; more particularly if they arise from external causes, and the constitution is otherwise good and sound.

It is only by such means that the patient can be effectually secured from the danger of an incurable cancer, which would be removed to no purpose, when once the blood was tainted with its poisonous influence; which like sour leaven will produce a diseased ferment,

ferment, even after extirpation, should the least part of the cancer be left behind. As a rank pernicious weed, it will again strike root, and spring up with its wonted vigor.

There are two circumstances of a very distressing nature, which attend scirrhus, or cancerous tumors of the womb in particular; for instance, their existence can seldom be discovered, with certainty, till they are too far advanced to admit of a cure by *medicines* or *regimen*; and their extirpation is generally impossible, when they are thus included in the cavity of the womb.

Besides, such tumors, from the internal heat and confinement of the cancerous discharge, are much more violent in their symptoms, and rapid in their progress, than those of the breasts or other parts; for, the mouth of the womb is sometimes totally shut up by the enlargement of the tumor, which confines the cancerous humor, and renders it more poisonous, even so as not only to corrode and destroy the womb itself, but also to extend

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to the bladder and fundament, and totally to consume those contiguous parts. This fatal circumstance befel a celebrated Irish actress, on the English stage, whose sufferings were too horrible for description, and who from thence died a lingering and miserable death.

The signs of a schirrus or cancer of the womb are very uncertain and obscure, being often mistaken and confounded with those of conception, a dropfy, or other affections of the womb; therefore, information should be taken from the *touch* as well as the *symptoms*.

In speaking of the menses; the extraordinary sympathy between the breasts and womb has been mentioned; and it is here necessary to remark, that in all cases, where a schirrous or cancerous disposition is in the least suspected, it will be necessary to examine whether the breasts are in a sound state; for, any pain, or enlargement of these parts affords a presumption that the womb may also be affected; particularly in bad habits of body, after the age of forty-five,

and where a sense of weight and sudden pain, with forcing down, is likewise perceived in the womb. This grievous malady is also to be feared where women continue to menstruate irregularly, and with pain, to a much greater age than ordinary ; for, such an unseasonable discharge is not properly menses, but generally arises from an ulceration of the womb, or a bleeding, spongy tumor of that part, tending to become cancerous.

When the patient will not submit to have the diseased part removed by the hand of a surgeon ; it then becomes necessary to attempt the cure by dispersion ; that is, by dissolving the obstructed matter in the gland, before it becomes cancerous. Various medicines have been proposed for this purpose ; the most powerful of which are *mercury*, *antimony*, and *hemlock* ; but it must be confessed they are often ineffectual ; and, what is still worse, instead of dispersing the tumor, they often exasperate and change it into a *confirmed cancer*, by exciting a fever, and inflaming

flaming the blood ; especially *mercury*, which should therefore never be employed without proper advice. In cancers, from a venereal cause, I have known mercury sometimes produce good effects ; but, in general, ripe fruits, the juices of the lactescent plants, as dandelion, succory, &c. or Castile soap dissolved in thin chocolate, are, by far, the safest deobstruents ; especially, where the part is affected with pain.

As the means proposed for a cure, do sometimes defeat their own purpose, by making bad, much worse ; it appears eligible to use such methods and medicines as are extremely mild and gentle.

Little benefit can be expected from medicine, without a proper regulation in the patient's diet. She ought to eat sparingly of animal food, and live chiefly on milk and vegetables : fresh eggs, shell fish, and a small quantity of any of the white meats, such as chicken, veal, or rabbit, without salt or seasoning, may be allowed every other day.

Her common drink should be toast and water, with a small quantity of French brandy, if the first is too cold for her stomach; but if she is naturally costive and feverish, nothing will be so proper as imperial water. She ought then totally to abstain from solid, animal food, and take broths medicated with sorrel, lettuce, endive, and such like herbs, with the addition of a small quantity of nitre instead of common salt, which will be equally palatable, and is of all others the most agreeable form of taking that cooling medicine.

Half a pint of fresh, new milk whey, in which one dram of the crystals of tartar has been dissolved, may be given night and morning. The aperient apozem, no. 21, may also be taken occasionally, if necessary, in the same quantity, which will serve to thin the blood, and open the obstructed gland.

When the tumor is external, it may be frequently bathed with juice squeezed from
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the pods of *sea wreck*, which is in the greatest perfection in the month of July, and may then be found in great plenty on the different shores. Two drams of salt of tartar dissolved in a pint of pure water, and applied milk warm to the affected part, with a soft sponge, twice or thrice a-day, is also a very powerful remedy, which I have known to produce a good effect; if it inflames the skin, a little milk may be added at the time of use. Should the malady be seated in the womb; the injection, no. 22, may be thrown up with a womb syringe, three or four times a-day.

If the patient is in much pain, attended with a fever, she should lose a few ounces of blood; and, after the body is rendered laxative by the medicated whey, with cream of tartar, she may take the saline mixture, no. 23; but if the pain should still remain excessive, the anodyne clyster, no. 24, may be administered in the evening, as occasion requires.

Afs's milk, goats whey, and Bristol water may all be used by turns, and should be continued for several weeks or months; otherwise no lasting good effect can reasonably be expected.

But as the most salutary of all medicines, I would recommend the decoction, no. 25, taken in the quantity of half a pint night and morning. Two of the hemlock pills, no. 26, are particularly proper after bleeding, and laxatives, when the diseased tumor is perceived to grow red, or to be affected with an itching, inflammation, or shooting pain; all which are unfavourable symptoms, denoting a strong tendency in the part to become cancerous. Indeed, the truth is, too much time is generally lost by vainly confiding in the power of medicine, whilst extirpation of the diseased part is often neglected till too late.

When the tumor unfortunately breaks out into a *cancerous sore*; Mr. Soultzer has recommended the *carrot poultice* as a very effectual

fectual application, for asswaging pain, and removing the intolerable stench attending such ulcers ; which, on trial, has been found to answer. Its efficacy seems rather to depend on the vast quantity of contained *fixed air*, than any peculiar virtue : It ought therefore always to be applied raw ; as boiling would expel a considerable part of this air.

The poultice may be made with common carrots, procured in the months of February and March, and grated fine, so as to make a pulp, which may be moistened with the juice of fresh carrots, and pounded till it becomes in consistence fit for a poultice. The old, full grown carrots, which are sticky, or those gathered in the spring, are unfit for use ; the first being almost void of juice ; in the last, it is too crude and watry.

The vapor arising from fermenting liquors being found to possess the extraordinary power of sweetening putrid flesh, might probably be applied with a good effect to fœtid ulcerous sores. The affected part might be placed

placed over the fermenting liquor, or receive the vapor in a full stream, from a pipe and flexible tube, proceeding from a vessel which contains *chalk* and *oil of vitriol*; and from which, without any agitation, a sufficient quantity may be produced for that purpose. By placing a thin piece of fine sponge on the surface of the sore, and directing the pipe immediately to it; the vapor would have a more permanent effect, and be more equally diffused over the sore.

A due attention to the passions and manner of living, as well as to diet, is also necessary. The patient should endeavour to preserve her body and mind from agitation and disquiet; she should abstain from the use of spirituous and fermented liquors, or strong wines; and avoid all violent exercise, as well as late hours, night air, and the extremes of heat or cold. The natural discharges of the body should also be regulated, in such a manner, as neither to become excessive or deficient.

Those

Those are the principal resources in schirrous and cancerous diseases, and although, from the very nature of those horrid maladies, they are too often insufficient to effect a perfect cure ; they seldom fail to mitigate the severity of the symptoms, to prolong life, and to render it more easy and comfortable.

Sometimes there are fleshy excrescences, which have long been improperly distinguished by the name of *Falſe Conceptions* ; thoſe, being in reality tumors growing from the ſubſtance of the womb. Clots of blood, ſqueezed, and compressed into a ſolid maſs, by its cloſe contraction ; or retained fragments of the after-burden, which put on the ſame appearance, have alſo frequently been miſtaken for a falſe conception.

In general, the fact is as follows ; When women miſcarry at an early period, the real conception, being almoſt in a gelatinous ſtate, from its extreme delicacy and ten-

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derneſs

derness of texture, is usually dissolved, and passes off from the womb in form of a fluid, leaving the after-burden still adhering to it; which, at last coming away, and no appearance of a child being found, it is then called a mole or false conception. Hence it follows, that the false conception lies in the brain of old women, and silly nurses, and is not to be looked upon as a false production of nature herself, who is but seldom found to transgress her own laws.

SECTION

SECTION VI.

Of the Descent, or Bearing down of the Womb.

THIS happens when the womb falls down through the *vagina* or passage, and appears externally in the form of a large tumor,

It has been the common opinion, that the womb is confined, and retained in its natural situation by two sorts of bands or ligaments peculiar to it ; and that this disorder was occasioned by some weakness or defect of those parts ; but, from the most particular examination, they appear to have very little sustaining power ; and experience shews, that a descent or falling down of the womb may happen without any fault in the one or other.

But, even allowing these ligaments to be affected, and their strength impaired ; still the womb could not possibly descend to

the external parts, without an uncommon dilatation or enlargement of the vagina; and on the contrary, so long as that part is endowed with a sufficient degree of resistance; no bearing down could possibly follow, although the ligaments had lost their sustaining power.

The immediate cause of this disorder must, therefore, be owing to a preternatural weakness, or enlargement of the *vagina*, or passage leading from the womb to the external parts.

Hence it may proceed from any cause which preternaturally tends to relax the vagina and render it so weak as to allow the womb, in whole, or in part, to intrude or press down thro' its enlarged cavity; when the first of those circumstances happens, it is called an *intire descent of the womb*, but if only the last, it is then termed a *bearing down*.

In whatever degree the disorder prevails, it will always be rendered worse by the upright position of the body; for then, the weight

weight of the womb rests more immediately upon the affected part.

If to this principal cause of the disease, other accidental causes are added, such as a cough, straining to lift heavy weights, or any violent efforts of the body, which act immediately on the womb; then it will be aggravated and rendered more difficult of cure.

Agreeable to those circumstances, a bearing down, and sometimes an entire descent of the womb, may happen in consequence of hard labours; where the fibres of the vagina or passage have been so overstrained, as not easily to be restored to their natural strength and firmness; especially in those of delicate constitutions: And on the contrary, virgins are seldom affected with it, except they are of a habit of body uncommonly lax and weak, or where the womb is in a diseased state.

The *Fluor albus* also disposes women to this complaint; because the inferior parts
contiguous

contiguous to the womb, gradually lose their resisting power by the continuance of the discharge; which not only exhausts the bodily strength, but so macerates and relaxes, as to render them preternaturally soft and yielding.

The disorder called a *bearing down*, is generally slight at first, producing an uneasy sensation, as if something was pressing upon the affected part; but, where there is an *intire descent*, the symptoms are much more violent and severe; for, the bladder being connected with the womb, is then pulled down with it, and occasions a difficulty of urine, attended with pain.

This inconvenience ought to be remedied by pressing up the tumor, when the patient is placed upon a bed or couch, so as to restore the bladder to its natural situation; which is a much more proper and eligible method, than that of passing the *catheter* to draw off the water; since in this particular case, the instrument would meet with
much

much resistance, and occasion excessive pain and inflammation of the urinary passage.

When the tumor is large, and descends so low as to appear externally, it is apt to swell and ulcerate ; but this does not proceed, as generally supposed, from the acrimony or sharpness of the urine diffusing itself over the surface of the tumor, but from the strangulation of the vessels at its upper part ; by which, the course of the blood is obstructed, even sometimes to such a degree as to produce a *mortification*.

The descent of the womb is attended with many circumstances of the most distressing nature to delicate women, who are, unfortunately, the most subject to it.

In bad habits of body, attended with a diseased state of the womb, there have been instances where it ended fatally, by producing a *schirrus* or *cancer*. In a word ; it hinders the regular returns of the menses ; brings on a *fluor albus* ; prevents conception ; and, at last, totally destroys the health.

It

It will therefore be prudent for every woman who at first perceives a bearing down, to consider it as the fore-runner of the disorders already mentioned, which may be prevented by regarding the following methods of cure ; or, if necessary, by applying for other relief, before the disease is rendered incurable from its long continuance.

The intention of cure will be, to replace the womb, and return it into its natural situation ; to strengthen, and brace up the vagina in particular, and the solid system in general.

When the disorder is not of long duration ; the two first intentions may be effected, by placing the patient on a bed or couch, with her head low and her hips raised, and then gently pressing up the tumor, till it is returned into its place. She should afterwards continue, as much as possible, in the same recumbent posture, and the cooler she is kept the better. By such means, the womb will retire from the weakened part, and relieve it from the weight

weight and superincumbent pressure, which it would otherwise sustain from an upright position of the body.

When the tumor is large and of long standing, attended with pain and inflammation; the patient should be bled, and emollient poultices of white bread and milk may be applied twice a-day to the part affected, before any violent means are offered to replace it; previous to which, the bowels ought to be emptied by a purging clyster, if necessary; and the urine should be evacuated from the bladder, either by the *catheter*, or the natural means, which is much better.

Should the reduction of the tumor prove difficult, it may be attempted in a temperate bath of milk and water, in which she should be placed with her shoulders low, as already directed; but whenever there might be danger of a mortification, by delay, she ought to have immediate recourse to those who are conversant with such disorders.

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After

After the tumor has been reduced, the intention of contracting the relaxed *vagina*, or passage, so as to prevent its future descent, may be effected by the frequent use of the astringent injection, no. 27, and by giving more strength and firmness to the whole bodily system. Nourishing diet, the mixture, no. 28, together with the waters of Tunbridge or Spa, will contribute most to this end. The use of the cold bath will also be extremely beneficial, where the internal parts are free from decay.

This gentle method, pursued with steadiness and patience will, at last, generally effect a cure, by restoring the weakened parts to their former strength; particularly, as there is a natural tendency in the solids of the body, to contract and regain their usual firmness, when freed from the stress and violence of such causes as before had diminished their power.

Some authors have forbid the reduction of the tumor, when ulcerated, 'till after the
fore

fore has been healed ; but this practice is neither founded in reason or experience ; for, it would be impossible, permanently to heal the ulcer, whilst the part remains out of its natural situation, and its vessels in a strangled state ; but on the contrary, being replaced, it will naturally heal without any other assistance than that of a little barley water, thrown up as an injection to keep the ulcer clean.

A simple bearing down, is sometimes cured by pregnancy ; from the effect of which, the womb enlarges, and will be gradually drawn upwards and reinstated ; however, after delivery, it generally returns with an aggravation of the symptoms. It will, therefore, be prudent for the patient to keep her bed the longer on that account ; and the more effectually to prevent a relapse, it will also be requisite to use the same strengthening medicines as already directed in the cure of that disorder, and to wear the T bandage, hereafter to be described, a few weeks after going abroad.

In this complaint, all violent efforts of the body should carefully be avoided, such as vomiting, coughing, sneezing or laughing; also tight lacing, or whatever compresses the belly, and womb. The same regimen as that recommended in the *fluor albus*, respecting air and diet, will also be proper and necessary.

The method here laid down, being directed to the very cause of the disorder, is in every respect preferable to the application of those painful and indelicate instruments, called *pessaries*, so often made use of with a bad effect; for, instead of strengthening the weak part, they lay an additional stress upon it, and consequently are highly improper. It must be plain to the most common capacity, that such applications only prevent the descent of the womb, by obstructing the passage; and therefore, so long as the part is thus kept in a state of continual distention, it never can be braced up or strengthened by the power of art or nature.

If

If the *peffary* is introduced too small, it will soon be forced away by the first fit of coughing, or strainings; and if too large, it will bring on the *fluor albus* in a high degree; besides, it generally becomes so painful, as not to be endured. In short, it is a painful and pernicious application, and ought therefore to be rejected from practice. It never can answer any good purpose, but on the contrary, will always increase the malady, by overstraining and weakening the part which was much too weak before.

In two particular cases where I was consulted; such Pessaries had been introduced; in the first, the patient was far advanced in years, and had worn the instrument for a long time. She complained of great heat and inflammation at the lower region of the belly, attended with violent colic pains, and a frequent but ineffectual endeavour to void her urine and stools; her fever was considerable, and at last she became delirious, from
want

want of sleep, and violence of pain, which threatened a mortification in her bowels. What I prescribed for her, only afforded a temporary relief; for the real nature of her complaint was at first concealed from me. The Pessary, which was made of cork, being very large, and closely confined by an inflammation of the parts; I was obliged to use considerable force to extract it, which occasioned great pain and a discharge of blood; however, by proper care and medicines, she soon recovered, and afterwards remained perfectly well.

The other case was attended with the like symptoms, though in a less degree, and were also removed by the extraction of the Pessary.

These are only a few instances set down, to shew the bad effects of those instruments; one of which was lately extracted from the fundament of a woman in St. Thomas's hospital. It had made its way from the vagina or passage, by a mortification of the
parts

parts, and had like to have cost the patient her life.

Should the descent of the tumor, prove very troublesome, and prevent the patient from walking about ; a fine sponge, wrung out of alum water, may be dried in a compressed state, and cut into any convenient form, so as to be introduced as high up the vagina as possible. This application will not only act by its astringency, but also by its pressure, though in a much more gentle and uniform manner, than any kind of pessary made of a harder substance.

During the use of this application, the astringent injection, no. 29, may be used twice a day, and the sponge tent should gradually be made smaller, from time to time, as the vagina contracts : The T bandage, hereafter described, may be worn a few weeks, the better to retain the tent, and also to secure the patient from the danger of a relapse.

SECTION

SECTION VII.

Of Abortion and Barrenness; and the Remedies most effectual in preventing these Maladies; with Rules and Cautions for the Conduct and Regimen of Women, during the several Stages of Pregnancy.

AS women who miscarry, undergo much more danger than those delivered at their full time; it is highly necessary they should be well acquainted with the nature and cause of *abortion*, as well as *barrenness*; the more effectually to prevent them.

Considering the various disorders incident to the womb, already treated of; it can be no wonder that its natural functions should be perverted or destroyed; and that women should therefore sometimes prove *barren*; or, that having conceived, they should often *miscarry*.

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In proportion as they deviate from the simple law of nature in their manner of living; the vital powers of the body will be impaired, and among the rest, those which contribute to multiply their species. This more evidently appears, by diseases and infirmities peculiar to women of superior rank, from which, those in a more humble station are almost entirely free.

The poor female cottager, who uses hard exercise in the open air, who eats the coarse, but wholesome bread of industry, and drinks from the cooling stream, yet with all this, can hardly gain subsistence, is seldom troubled with those maladies which afflict the rich and indolent, undone by the abuse of plenty. Her body, like that of the modern fine lady, is not robbed of its native vigor by unseasonable indulgence, nor her nerves convulsed by the insults of the passions, or the excesses of midnight dissipation: So far from being barren, she generally becomes the mother of a numerous and healthy offspring; which,

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like young oaks of the forest, planted by the hand of nature, without the imperfect, artificial helps of a nursery, by nature simply live and thrive.

Among the general causes productive of *abortion* and *barrenness*, may be reckoned all those which occasion *irregularity* or *obstruction of the menses*; for, it has already been observed, that such as menstruate sparingly, at undue periods, or not at all; are either barren, or produce a puny race, which are often brought forth before their time.

Abortion and *barrenness* may therefore be looked upon as diseases of the secondary kind; arising from a fault in the general habit of body, or from some particular defect in the natural structure and functions of the womb; and considering the many disorders incident to that organ, of which we have already treated; it can be no wonder that women should sometimes be barren, or that having conceived, they should so frequently miscarry.

Such

Such faults of the constitution as produce abortion, may arise from a *scorbutic* or *scrophulous* habit of body; or from a *venereal taint*, which vitiate and corrupt the blood, and render it unfit to nourish the child in the womb. Poison the source from which a vegetable draws its juices; and, instead of producing fruit, it will wither and die.

Abortion may also happen from fevers, or other acute diseases incident to the mother; from external violence, as blows or falls, from sudden terror, or anxiety of mind; offensive smells, or food taken into the stomach which offends in quantity or quality; and likewise, from a violent purging with tenesmus or forcing to stool: A preternatural conformation of the womb, where it is too narrow and contracted, or such diseases of the child as there destroy it in the bud, may likewise prove the cause of abortion.

Women are most liable to miscarry in the first four months of pregnancy; for then the vessels

connecting the child to the womb is so extremely delicate as to be broken afunder by various accidental causes; and when all intercourse between the one and the other is destroyed, abortion must necessarily follow. So great is the *analogy* between animal and vegetable bodies, that the *embryo* or child in this tender state, may be compared to a blossom, which is often blighted by piercing winds, or sharp frosts, before the fruit is perfectly set.

Acute fevers, or the extremes of sudden *fear* or *anger* create abortion, by increasing the motion of the blood; which rushes with violence upon the womb, and forces off the after-burden adhering to it, and which before extracted nourishment for the use of the child. In such cases, bleeding, gentle evacuations by the bowels, and the opiate pill, no. 30, are the principal remedies; together with the warm bath, more particularly, if the patient has been frightened; but if she has had a fall or blow, the balsamic, laxative mixture, no. 31, after bleeding, will be sufficient

ficient; directing her a spare, thin diet at the same time.

Sickness and vomiting, or swimming in the head, occasioned by offensive smells, may be relieved by *Eau de luce*, lavender water, or sharp vinegar applied to the nose; and if the stomach is oppressed with improper food, it may be discharged by the gentle emetic, no. 32; but should the patient be attacked with a violent purging, attended with pain, tenesmus, or bloody stools, she ought by no means to trust her own judgment, but to apply for proper advice; as all violent disorders of the bowels are attended with great danger.

Those *abortions* which usually happen about some certain period of time, as in the sixth or seventh month, are generally owing to a contracted womb, and are therefore incurable; except the frequent distension of the part, by repeated conception, should at last remedy this inconvenience; otherwise, we have no power to alter the natural structure

ture of that organ; neither do those abortions admit of relief, where the *stamina* or principles of the *embryo* are originally diseased.

In such cases, no remedy has perhaps been so much abused as *bleeding*, which, like other means, becomes beneficial or hurtful according to the time and quantity in which it is directed.

The quantity of blood carried off at each *monthly period*, in the space of nine lunar months is found to be much less than the weight of a new born infant, and its after-burden; which are supposed actually to be constituted of the menstrual blood, retained, during pregnancy, for that purpose.

Women are therefore observed to become much thinner in the last months of pregnancy, from the consumption of their own proper juices, as well as that blood destined by nature for the immediate nourishment of the child. Hence it appears, that bleeding, without some pressing occasion for it, is not only unnecessary, but even pernicious, in the
last

last months of pregnancy, when the child becomes so large, as to require full as much blood as the mother can possibly spare.

Since women of strong habits, who continue to menstruate in the first months of pregnancy; are apt to miscarry about those periods; it will be adviseable, at such times, to take away a small quantity of blood, till after the fourth month; especially if the patient is feverish or in pain.

The body should then be rendered cool and laxative by ripe fruits, and the patient should use a slender diet; which, indeed, nature herself immediately points out; for the stomach, like a faithful monitor, then rejects its contents, instead of digesting them; and consequently, by the sickness and vomiting prevailing in the first months, the symptoms of fulness are lessened, and the malady relieved.

But to speak experimentally; though well-timed bleeding in the first months may sometimes be of service; in general, there is not that occasion for it which is commonly

monly supposed; for I have frequently observed, that young women, although they were plethoric, very seldom miscarried, if strong and healthy in other respects; and on the contrary, those of a weakly and hysterical habit were frequently liable to abortion, although no overfulness of the vessels prevailed.

In such constitutions as the last, bleeding is always highly pernicious; for women as often miscarry from the want of blood as from its redundance; and the more their vessels are emptied, the weaker will they become, and the more susceptible of every external impression affecting the body and mind: Therefore, insted of diminishing the quantity of blood, every thing should be done to increase it, and to strengthen the nervous system.

As the causes of abortion are almost innumerable, it is extraordinary that women do not oftener miscarry. In fact, the extinction of a candle, or the most trifling accidental causes,

causes, will occasion it in some; whilst in others, such is the retentive faculty of the womb, that no impression on the body or mind, however violent, or any medicine, however powerfully noxious in itself, is sufficient to bring on a miscarriage.

I have known several instances, where abortion was produced by the smell of fresh-painted rooms, and by the patient's over-reaching herself; and others, where tincture of black hellibore, and suchlike violent, forcing medicines were rashly administered in a supposed obstruction, which turned out pregnancy, and yet no abortion ensued.

As I had been at Lisbon the year before the *Earthquake*, humanity, as well as curiosity, led me to enquire after the fate of several Ladies who were then pregnant; yet notwithstanding that dreadful calamity, by which so many thousands perished, and where nothing presented but sights of the extremest horror, which actually killed some with sudden fear, I was informed, that ma-

ny of them escaped abortion, and were happily delivered at their full time: So different was the effect of the same cause, in different constitutions endowed with different degrees of nervous feeling.

Whatever may be the cause of abortion, the effect is produced by separating or forcing off the after-burden from its connection to the womb; and consequently, the child being deprived of nourishment, must soon perish and be expelled. The most common signs of abortion, are a forcing down, with slight pains like those of labour, and the discharge of a watery fluid tinged with blood; together with mucus of a redish color, commonly called a shew, or token of approaching miscarriage.

Under those circumstances, especially in the first four months, assistance from the hand of the midwife is seldom necessary; and the medicines usually administered have but little effect; however, the patient may take a spoonful or two of the anodyne julep,

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no. 33, which will mitigate the pains and procure her rest. She ought to be kept cool and quiet, and to remember that she is always in the least danger, in proportion as she miscarries without any violence applied, under the pretence of giving her assistance. If her pulse is full, attended with much pain or fever, she ought to be bled; especially if she has sustained any injury from external causes; otherwise it will not be necessary.

On this occasion, I am desirous to caution the patient against the dangerous use of such medicines as are supposed to be endowed with the singular power of bringing away the child and after-burden, and procuring what is called an easy time; the bad effects of which I have remarked at page 66; for all such medicines are of the forcing kind, and therefore may kindle up a fever, and occasion a dangerous flooding, or perhaps an inflammation of the womb, and death itself.

In all cases of apparent miscarriage, there is one particular sign which ought to be at-

tentively regarded, viz. the discharge of a flesh colored, flaky substance, which comes away with the waters ; for, when this delicate membrane peels off from the womb, and once appears, it is out of the power of human art to prevent the impending evil: This substance being the very cement and *bond of union* between the mother and child, and being now broke down, and dissolved, all communication must cease ; and, the last being deprived of nourishment, abortion will necessarily follow. Medicines therefore proposed to be given by way of precaution, are, in such cases, totally out of the question.

As a suppression of the menses is by far the most common cause of sterility or barrenness ; the proper regulation of that discharge will contribute more to remove it than all other methods whatever ; the Reader is therefore referred to what has been laid down on the treatment of obstructed menses.

Particular

Particular diseases of the womb, such as a schirrus, cancer, or dropfical state of that part, or any kind of excrescence shutting up its orifice, may also render the patient barren.

The *fluor albus* may likewise prevent conception, or where it really happens, render it of no effect; for if the womb is overcharged with continual moisture, the delicate Embryo may glide through its relaxed and dilated orifice, before it has had time there to strike root. Besides, as the womb is not the original seat of conception, but receives from the *ovarium* the impregnated ovum, or child in miniature, by means of a slender tube; if any of the parts subservient to this organ are diseased, or defective in their office, no conception can then follow, although it remains perfectly sound, and in its natural state.

Sometimes there is a total closure of the passage to the womb, by a preternatural expansion of that membrane called *Hymen*, which may render commerce with the male ineffectual, and the discharge of the menses impossible

impossible. Two or three instances of this kind have occurred to me in practice, where the patient was therefore suspected of being with child, both because of the swelling of her belly, and the absence of the menses.

In one of these cases, the menstrual blood, at every monthly period, was retained in the womb, instead of being outwardly discharged, creating a considerable enlargement of the belly, and other very distressing symptoms, which however, were at last perfectly cured by the necessary operation.

On such occasions the state of the womb should be particularly attended to, and information taken from the touch, if necessary; and if any defect be perceived in the generative parts, it should be remedied if possible, by the assistance of a skilful surgeon. But where the patient labours under a *suppression of the menses*, or a profuse discharge of the *fluor albus*; the first should be promoted, and the last restrained, according to the rules laid down in treating of those particular diseases.

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I have known some barren women become fruitful, by going from a cold to a warmer climate. A woman in London who had been married nine years, and during that time never had a child or miscarriage; by residing with her husband in the West-Indies, soon afterwards became pregnant, and was delivered of her third child at the Westminster lying-in hospital.

This case, as well as some others, which I have observed of the like kind, suggest a useful hint, and point out the necessity of producing that change of habit, which can only be effected by an alteration in the degrees of heat, the qualities of the air, and difference of diet. Besides, we have already remarked, that women menstruate more freely and regularly in warm climates, and that such are always most fruitful; which seems to account for the extraordinary instance now mentioned.

This remark is further confirmed by the following circumstance, viz. Some women, though in the same climate, conceive at one particular

particular time of life, who had been barren at another; especially such as were weak and delicate: This seems to happen in consequence of a certain change produced in the constitution by the effect of increasing age, which hardens the fibres, and adds strength to the whole system.

Where barrenness proceeds from bodily weakness, nothing will so powerfully assist as nourishing diet, preparations of the Peruvian Bark, the iron waters of Tunbridge, Pyrmont, or Spa; or where they cannot conveniently be procured; pure water, artificially impregnated with the qualities of those natural ones, as directed by Dr. *Priestley*, and which perhaps is not inferior in its effects, may be drank fresh prepared. Moderate exercise in a pure, dry air, and the use of the cold bath, will also contribute greatly to the relief of those who miscarry from a weak and irritable nervous system.

To conclude; as sea voyages, change of climate, and alteration of diet have been found to cure consumptions, and other chronic

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nic diseases, where medicines availed but little; and as those cures were manifestly brought about by a gradual, mechanical change in the bodily powers; it seems highly rational to recommend a trial of their effects in cases of barrenness, so often arising from concealed maladies which disorder the constitution.

I would wish to recommend the following *Simple Regimen*, which may be varied occasionally as circumstances require.

If the patient is of a full habit and inclined to grow corpulent, let her increase her exercise and lessen the quantity of her diet ; which should chiefly consist of milk, vegetables, and a small quantity of animal food without much seasoning. For such ; pure water, lemonade, or imperial water, are the best drinks.

If she is thin, weak and delicate, less exercise will be sufficient; and her food should be taken often and in small quantities: White meats, jellies, shell fish,

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and fresh eggs, may chiefly constitute her diet. After dinner, she may drink a small quantity of brandy with water, sometimes a glass of Port or Madeira wine, or half a pint of clear, old London porter: Tea, especially in the morning, is pernicious, as well as the custom of drinking all her liquors warm; which macerate and relax the stomach, and destroy its digestive faculty. For breakfast she may drink coffee, milk, or thin chocolate. The strengthening infusion, no. 34, may be taken twice a-day, and at the same time the cold bath will be highly beneficial. She should go soon to bed, and rise early.

Absence from home may also be requisite; for some women, who for a time had retired from the embraces of their husbands, proved with child after their return.

Various have been the means devised to catch the attention of the weak and credulous, under the pretence of making barren women conceive; but, unfortunately for the patient, they have generally failed in the trial.

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The craft, and subtle artifice of those, who, like gypsies and juglers, turn the extravagant belief of the public, to their own private gain, have introduced charms, incantations, and such like ludicrous mummery; as well as odious and uncouth medicines which nature should abhor.

A due attention to the following simple *Rules* and *Cautions* for the conduct of women during the different stages of pregnancy, will be necessary; particularly for those who have been apt to miscarry.

For the first three or four months women of full habits should live on simple diet, and somewhat more abstemiously than usual. Every thing which violently increases the blood's motion, whilst the connection between the mother and child is slender, should be carefully avoided; and therefore, agitation of body or inquietude of mind, will be highly injurious. If the patient is strong, has a full pulse, and is at any time affected with pain, fever, head-ache, sickness,

or vomitings, she should lose a few ounces of blood ; and if costive, a spoonful or two of the laxative mixture, no. 35, may be taken occasionally, till it produces its effect ; and afterwards, the use of ripe fruits and a vegetable diet will keep her body cool and temperate.

If she is weak, delicate, and hysterical ; or so irritable as to be affected with a flurry of spirits, or nervous trembling from the slightest causes ; bleeding and evacuations are improper. At such times, the infusion, no. 36, may be taken twice a-day, and one of the anodyne pills, no. 37, occasionally, whenever she meets with any sudden surprise, or is affected with pain which deprives her of sleep.

Her diet should be of the nourishing kind, consisting chiefly of broths, jellies and the like. If she is subject to indigestion, and much oppressed with wind at stomach, she should abstain from tea and vegetables ; and insted of malt liquors (a glass of clear old porter excepted), drink toast and water, with
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the addition of a small quantity of rum or French brandy. In the summer, she should lay cool on mattresses, and not indulge herself too long in bed.

After the fourth month she may live on a fuller diet, and use more exercise, till about the beginning of the eighth, at which time, if she find herself heavy and unwieldy, affected with the cramp, pains in her loins, or swelling of the legs, she should often be indulged on a bed or couch during the day.

If she is costive and subject to the heart-burn, or piles; the use of magnesia will be proper; and if sleepy after dinner, or oppressed with throbbing and palpitation of the heart, she should diminish the quantity of solid food, and live chiefly on milk, nourishing broths, and spoon meats.

SECTION

SECTION VIII.

Of the Hæmorrhoids or Piles; Obstruction or Incontinence of Urine, Strangury, and Ulceration of the Bladder.

THE Hæmorrhoids or Piles is a complaint to which indolent and inactive women of gross habits are often subject, especially during pregnancy; not only from the enlargement and pressure of the womb, but also from costiveness so frequent at this time; both which obstruct the circulation of blood, and overload the vessels of the *rectum* and fundament, so as to occasion heat, throbbing, and acute, darting pain in those parts; and hence the name of piles.

This disorder is distinguished into the *blind* and *bleeding piles*: The first, are not attended with any rupture of the vessels, or discharge of blood; but in the last, the veins are so overcharged, as to push out-wards

wards in form of irregular bumps, which burst and pour out their contents.

The blood discharged by the open or bleeding piles, may be distinguished from that voided in the *bloody flux*, by the following signs. In the first, the pain is local, chiefly confined to the fundament, and the blood comes away alone, or before the stools; but in the last, the pain is more extended over the belly; the blood is discharged together with the stools, or comes away afterwards by the efforts of straining.

From the *bleeding piles*, although a troublesome disorder, many apparent benefits are derived to the constitution, in preventing some diseases, or curing others; and therefore, the discharge ought not to be too hastily suppressed, except it becomes so immoderate as to occasion faintness and loss of strength.

In complaints of the *head, breast, and bowels*, attended with low spirits, and melancholy; many examples might be brought
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to shew its salutary effects; and in complaints of the bladder and womb, it has been found more immediately serviceable, in consequence of a communication of vessels between those parts, and the part affected, from which the offending blood is gradually evacuated.

Here it may be proper to remark, that blood is often discharged from different parts of the body, at different periods of life, according to the peculiar state of the habit which then prevails: In youth, it often escapes from the *nose*; at maturity, it proceeds from the *womb*, sometimes from the *stomach* or *lungs*; and in a more advanced age, or the autumnal season of life, it frequently passes off by the *bleeding piles*; either to compensate for the loss of some other necessary discharge, or to relieve the constitution of blood which then too much abounds.

There is a manifest sympathy or consent between the menses or bleeding piles: For
 instance,

instance, when the first are obstructed, I have sometimes observed the last become periodical, and supply their want. Such a discharge therefore, can never be stopped without injury to the constitution; neither should it be suddenly restrained, whenever it happens about the *cessation of the menses*; since then it seems to be an expedient made use of by nature to prevent the inconvenience of too sudden a stoppage of that long accustomed evacuation.

I have seen several instances of its good effects in such cases; and where, by its overhasty suppression, great anxiety at the breast, with palpitation of the heart, and internal fluttering have been brought on; attended with *hysterics*, dejection of spirits, and a train of the most distressing disorders; which could not be so effectually relieved by any method as that which procured a return of the bleeding piles.

This disorder may be brought on by habitual costiveness, the immoderate use of spirituous
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liquors, or strong purgatives with *aloes*. Violent anger, anxiety of mind, or taking cold, will also have the same effect. From high living, or improper treatment, which heat the blood and excite a fever; it is sometimes terminated by inflammation and a collection of matter, producing a *fistula*, or hollow ulcer, not easily cured without cutting; especially, in bad constitutions, or those who lead a sedentary, inactive life.

Bleeding, laxatives, and a spare, cooling diet of the vegetable kind, are proper in the blind piles, attended with pain and fever. The liberal use of ripe fruits are beneficial; and also veal broths, with a large addition of cooling herbs, and a little *nitre* insted of common salt, which thus taken is very palatable, and productive of remarkable good effects; by promoting perspiration and urine, and gently opening the bowels.

The patient should often indulge herself, if possible, by lying down on a bed or couch;

couch; and nothing will relieve her more than being kept extremely cool; her food should be light and easy of digestion, and she may take cream of tartar whey, or imperial water for common drink.

When the pain is excruciating; *Leeches* may be applied to the affected part, and tempted to take hold by touching the surface with blood; but if they will not fix, the blood may be safely discharged from the larger piles, with the point of a fine lancet, which generally procures immediate ease. The opiate clyster, no. 38, scarcely milk warm, may be administered when the pain continues acute; and if the pipe is covered with a pigeon's gut inverted, it will glide up with much more ease to the patient.

If she cannot be prevailed upon to submit to this method; she may be placed over the steam of warm water, impregnated with a handful of Lavendar and Elder Flowers, and to which half a table spoonful of *liquid laudanum* has been added at the time of use.

Nothing will give more instant ease in a painful fit of the blind piles, than the application of intense cold to the surface of the body. A glass of cold spring water may be taken at the same time, and a soft sponge dipped in the cooling lotion, no. 39, may be applied to the affected part, and secured by the T bandage. The opening electuary, no. 40, may then be taken in the quantity of a nutmeg every other morning, or oftener, so as to keep the body gently laxative.

Ointments are most proper after the pain and inflammation are abated; and should any be used, that at no. 41, is most neat and eligible, on account of its whiteness and want of smell; but those applications are not so efficacious as generally imagined.

Where the strength is apparently wasted by too profuse a discharge of the bleeding piles, it may be restrained by keeping the body extremely cool, and by the use of vegetable acids taken in common drink; such as the juice of lemons, oranges, or pomegranates,
or

or a decoction of *tamarinds* sweetened with manna. The affected part may be bathed twice or thrice a-day with a soft sponge, dipt in port wine, which may afterwards be gently bound on the part, by means of the T bandage. A tea-cup full of the strengthening, astringent mixture, no. 42, may then be taken twice a-day, with great advantage.

Nothing is so efficacious to recal the bleeding piles, as the use of small pills made of purified *aloes*, one of which may be taken every night and morning, and the patient may at the same time use emollient clysters and the warm bath. So powerful is the effect of *aloes* in producing the piles, that we are told, the *Jews*, *Venetians*, and eastern people, from the frequent use of this drug, are of all others the most subject to that disorder.

I have here purposely omitted the mention of *sulphur*, as a medicine frequently given for the piles; but from what I have
repeatedly

repeatedly seen of its effects, I cannot think favorably of it; having twice observed a very dangerous, and profuse discharge of blood from the womb, occasioned by its liberal use. It evidently heats the body, and increases the blood's motion; and therefore, acts in a manner directly contrary to the intention of giving relief; like many other things, more regarded from custom than propriety.

I have directed sulphur with a good effect in the *chronic rheumatism*, and other cases of the like kind, proceeding from weak vessels and a languid circulation: It seems to act by promoting a free and equal distribution of the blood, and by increasing insensible perspiration.

Those who have been subject to the *piles*, and wish to prevent their return, should keep the body laxative, and live on light and simple food; they should use gentle exercise, and drink pure water; avoid spirituous liquors, night air, and, as much as possible, anger, or anxiety of mind.

Disorders

Disorders of the Urinary Bladder, may proceed from all such causes as produce pain and inflammation of that part; viz. injuries received in hard labours; the gravel and stone, or a long and painful retention of urine. Also sharp scorbutic humors, or the translocation of febrile matter to that organ at the crisis of a fever.

The sudden suppression of the menses, or bleeding piles; the immoderate use of mercury, Spanish flies, or such like violent and corrosive medicines, have also been found to injure the bladder.

Too long a retention of urine, from that modesty peculiar to the female sex, has often been productive of the worst consequences, and is one of the most frequent and principal causes of diseases in the bladder; which might be avoided by imitating that freedom of retiring peculiar to French Ladies, who are much less subject to such complaints, than those in England. On this occasion, the
last

last might part with a little of that mistaken modesty which can answer no good purpose, but on the contrary, tends to injure their health.

The urine, when too long retained in the bladder, may prove hurtful both by its quantity and quality: The first will overstrain its fibres, and produce weakness or palsy of the part, so as at last to bring on *Incontinence of urine*; and when by heat and long stagnation, the oil and salts of that fluid have acquired sharpness and acrimony, they will corrode the internal coat of the bladder, and occasion pain and inflammation; fever, strangury, and even ulceration.

The celebrated *Tycho Brahe* being in a coach with the Emperor of Tuscany, and retaining his urine too long, forfeited his life to his false delicacy.

Pressure of the child's head on the neck of the bladder, during labour, or the subsequent inflammation, may also create pain and difficulty in rendering the urine.

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The method of treating this disorder must be varied according to the various causes by which it is produced.

If it arises from any violence creating local pain and inflammation which shut up the urinary passage, bleeding and laxatives will be proper; after which the anodyne emulsion, no. 43, or linseed tea may be given for common drink; an emollient clyster with mallow leaves boiled in milk may also be administered; and for nourishment the patient may take veal broth, with a little nitre; small quantities of any simple food void of high seasoning.

The warm bath may also be used; but if the symptoms do not speedily give way to such treatment, the urine should be drawn off by the *Catheter* without delay; for whilst it continues to collect in the bladder, and cannot be evacuated, it would be in vain to expect relief from any other method. However, it may be laid down as a general rule, that all such diseases of this part as pro-

ceed from a *scorbutic*, gross habit of body, can only be remedied by such diet and medicines as powerfully promote the natural discharges, and restore the blood to its balsamic state.

If the patient is subject to the *Stone* or *Gravel*; half a pint of shell lime water, with a third part of new milk, may be drank once or twice a day; or one dram of almond, or Castile soap, dissolved in half a pint of thin chocolate, taken at two doses by proper intervals as the stomach will bear. But the medicine, of all others the most elegant, and what I have often directed with good success, in such cases, may be found at no. 44. Such remedies however, should be regularly pursued for several months, otherwise no lasting effects can be expected from them. But indeed, the truth is, they are much better calculated to prevent the formation of gravel in the kidneys, than to dissolve it when concreted into a stone in the bladder.

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The patient may know whether the bladder or kidneys are affected by the nature of the symptoms, viz. When the first, the pain is seated low in the belly, or contiguous to the urinary passage; but in the last, an indolent pain, with numbness, is perceived across the loins, which abates from time to time, as the sandy particles fall down from the kidneys into the bladder.

This last species of the disorder, if violent, is generally attended with sickness at stomach, pains in the bowels, and a profusion of *bile*; and therefore, has frequently been mistaken for a complaint of the bilious kind: But, as it arises from nervous sympathy; bleeding, a solution of gum arabic and opiates will be properest to allay the pain and inflammation, after which the bilious symptoms will cease.

In this particular case; *vomits*, which would agitate the body, and increase the pain and inflammation, are highly dangerous, although they have often been inad-

vertently directed, on account of the bile and sickness at stomach.

An *Incontinence of Urine*, or want of power to retain it the usual time, may proceed from a preternatural weakness or palsy of the neck of the bladder, which sometimes happens in the decline of life; also from a laceration, an ulcer, or injuries received from a difficult labour; in consequence of which, the urinary passage is imperfectly closed; and from thence the urine is allowed to escape involuntarily.

The passage of a large stone, or an obstinate retention of urine, may also produce this disagreeable complaint; for, however contradictory it may appear, an obstruction of urine, by overstraining the fibres of the bladder, will so weaken, and impair its retentive power, as to produce the contrary extreme, and at last occasion its *involuntary discharge*.

When the disorder arises simply from weakness and relaxation of the parts; the strengthening infusion, no. 45, may be taken

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in the quantity of a tea-cup full twice a-day, Jellies, and a nourishing diet are proper; the patient should also drink Pyrmont, Tunbridge, or Islington waters; and at the same time make use of the cold bath.

If it is brought on by violence done to the affected part; bleeding, laxatives, and a slender diet will be proper; and afterwards, the general habit may be strengthened, by the methods above directed. But should they fail; a *Small Instrument* with an elastic, silver spring, which cannot here be described, may be adapted to the affected part, in such a manner, as to remedy this disagreeable complaint.

An *Ulcer of the Bladder*, is a disorder of the most irksome kind, and extremely difficult of cure; especially in bad habits of body, where the patient is far advanced in years; for, the bladder being constantly either gradually filling with urine, which puts its fibres on the stretch; or contracting for the expulsion of that fluid; it does not
remain

remain long enough in a state of rest, to recover of the injury sustained, or allow the sore to heal.

The same general causes as those producing pain and inflammation, sometimes terminate in an ulcer; hence too much caution can never be used, in disorders of this kind, even when at first apparently slight; for many instances might be brought to shew their unfortunate event, when too long neglected.

When the disease arises from a bad state of the blood, it is often inconsiderable in the beginning, commencing with a sense of heat, and indolent pain at the lower part of the belly; but at length is attended with the *Strangury* or frequent endeavour to make water. The urine is not only voided with difficulty, and in small quantities, but sometimes mixed with blood and matter of a putrid and offensive smell, like that coming from an ulcer in any other part of the body.

Balsams of the terebinthinate kind, commonly used in the early state of this disease,
before

before the inflammation is subdued, and the ulcer disposed to heal, have been found to exasperate the disease by their heating quality.

The like methods and medicines are here proper, as those mentioned in a painful suppression of urine, or an ulcer of the womb. The emulsion, no. 46, or a solution of gum arabic in lime water, and a third part milk, may be taken for common drink, and the patient should abstain from wine and malt liquors. She may take the bolus, no. 47, with linseed tea, or a decoction of fresh *elm bark* twice a-day. If the body is costive, a glass of fresh new milk whey, sweetened with honey, will be proper to remedy that inconvenience.

An infusion of *pine buds*, or a decoction of the green tops and berries of the juniper shrub, with a small quantity of manna, in cold constitutions, where the disorder is void of pain or fever, may be given with advantage; and also the white balsamic mixture, no. 48.

The patient should confine herself to a light, abstemious diet of milk, vegetables,
honey

176 DISEASES OF THE BLADDER, &c.

honey, and ripe fruits; with a little animal food, jellies, or veal broth by turns. She should abstain from things salt and high seasoned; from mustard, pepper, horse-raddish, &c. and also from tarts or acid liquors. Ass's milk with Bristol water and goat's whey are proper; but above all, the use of the decoction, no. 49, in the quantity of half a pint, twice a-day.

When the pain and irritation are violent, an opiate clyster made with the decoction of two or three white poppy heads, may be injected milk warm, which will cherish the affected parts, assuage the pain, and produce the effect of an internal fomentation.

C H A P.

C H A P. III.

SECTION IX.

*Diseases of the Stomach and Bowels; their
Treatment, and Cure.*

IF it was, at first, necessary to explain the functions of the womb, and to shew its extensive influence on the female constitution; so it is equally requisite to consider the natural office of the stomach, as the very source from which the body derives its nourishment and support.

Here, the first process of preparing that vital fluid, *blood*, is begun; and according as the digestive faculty of that organ is duly, or imperfectly exerted on the aliment, so the blood will be rich, balmy, and pure; or sharp, crude, and watery: The first of these qualities will contribute to health; the last will render it unfit for circulation and the

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purposes of life, and consequently lay the foundation of various diseases of the *chronic kind*.

The stomach may be considered as a vessel placed in the center of the body, like an animal *Alembic*, for concocting and digesting the food daily taken in for its nourishment. From the action of *mastication*, or chewing, the aliment is broke down, and by mixing with the *saliva* or spittle, is reduced into a pulp: Thus prepared, it is swallowed, and descends into the stomach, where, assisted with heat and moisture, it undergoes a slight fermentation; by which the air included in its pores is expanded, and bursting from its confinement, destroys the solid compact texture of the food, rendering it one degree still more fit for nourishment.

This will be the more easily effected, as animal and vegetable substances have a natural tendency to dissolution, when all circulation through their vessels ceases, and when thus deprived of their contained air, that be-
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ing the very *vinculum* or bond of union which holds their parts together.

The mass being sufficiently macerated and digested, is expelled from the stomach into the alimentary tube or small guts, where, its most nutritious part, like an emulsion, called *Chyle*, is sucked up by the *lacteals* or milky vessels opening into the cavity of the tube, from whence it is conveyed into the blood; and by repeated circulations with the general mass, at last acquires the same color, quality, and consistence; or in other words is changed into *real blood*.

Having thus simply traced the aliment from the mouth into the blood; it will more evidently appear, how that vital stream is continually fed and replenished by fresh *chyle* passing into it through the milky vessels, like so many rills or little currents, which keep up the circulation, and repair the daily waste made by exercise and the natural discharges of the body.

However opinions may differ respecting the precise manner by which *digestion* is brought about, 'tis certain that the *stomach*, like the heart and other vital parts, derives its principal power and energy from the *nerves*; for when those with which it is supplied are cut or injured, both appetite and digestion are suddenly destroyed. Hence, grief, long continued illness, or intense study, which act on the brain and nerves, are found greatly to impair digestion, and lay the foundation of many *chronic* or wasting diseases, hereafter to be treated of, and which could not have been so well understood without this previous knowledge of the very source from whence they originate.

The stomach holds a double intercourse and correspondence with every part of the body; first, by the conveyance of *chyle* into the blood; and next, by sensation or *nervous sympathy*; by which, impressions made on the nerves of that organ are from thence communicated to the brain and other parts.

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Thus the tooth-ache has often been relieved by a liberal dose of *opium* taken into the stomach, long before it could enter into the blood, or arrive at the part affected, by the common road of circulation; and the trembling hand of a hard drinker, presently becomes more steady after taking a cordial dram, merely by touching and invigorating the nerves of the stomach. A violent blow on the head excites that convulsive motion of the stomach called Vomiting; and bile, an acid at the stomach, or other offending humours, often occasion giddiness and headache.

So great is the sympathy between the head and stomach, that it is difficult to know which is originally affected; although the danger of mistakes, on this occasion, might be attended with the most serious consequences: For example, should a *blister* be applied to the head when only affected, by sympathy, from a profusion of bile at the stomach; or should an *emetic* be administered
when

when the patient is seized with a vomiting, from inflammation or any violence done to the brain ; the first would give great pain to no purpose, and the last, by straining the body, and overcharging the inflamed vessels of the brain, might produce a *delirium* and *death*.

The best method of making a true distinction in such cases, will be to observe whether the *head* or *stomach* is first affected ; and according as it is found to happen in the one or other of these parts, that ought to be deemed the original seat of the disorder.

There is also a manifest consent between the bowels and skin ; for where the pores of the last are obstructed, or in plain terms, when the patient has got cold ; the perspirable vapor, instead of passing off from the surface of the body, will fall on the internal parts and occasion a diarrhœa, or purging, with colic pains. Wet feet will also disturb the bowels ; and the stone or gravel will produce vomiting, and a profusion of bile.

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An uncommon degree of sympathy also prevails between the stomach and womb; for women after conception are often visited with sickness or vomiting; and the violence of labour-pains have frequently the same effect.

Being amply supplied with *nerves*, the instruments of all our sensations, such is the extraordinary sensibility of the stomach, especially if disordered or inflamed, that the skin when excoriated by a blister, is not more exquisitely tender: So that harsh, irritating food, although scarcely affecting the palate, will then produce violent pain and vomiting.

By the same uncommon sensibility it is also endowed with an elective or instinctive power of chusing and refusing whatever is most grateful to itself, or beneficial to the constitution.

There are very few who have not some particular liking, or natural antipathy to certain kinds of food. Cheese, honey, or other things

things of the like nature, which are agreeable to some, act with the violence of poisons on others.

Thus, like a watchful centinel, the *stomach* gives warning and denies admittance to what would be injurious; and often craves with avidity such things as prove salutary. Hence, the extraordinary longings of women with child; and the eager thirst for cold water in the height of a burning fever, which being drank, has often terminated the disease, and saved the patient's life, after the power of medicine had been tried in vain.

Perhaps it may be objected, that the stomach is not always its own sufficient guide; because it does not discover the insidious and deadly power of some *poisons* till too late: But we might as well complain of dim and defective eyes, because they do not as easily perceive a mote, as a house or mountain; or since minute objects are more distinctly seen by the assistance of a microscope than the naked eye.

STOMACH AND BOWELS. 185

In short, what *Damocrates* says of the *womb*, viz. that it is an animal within an animal, might with more propriety be applied to the *stomach*; so faithful a monitor is that organ, and so truly wonderful is its distinguishing faculty, as long as it remains in a natural and undepraved state.

Before we consider the particular disorders of the stomach and bowels, with the most effectual methods of their cure; it will be necessary to describe the properties of the *Saliva* or spittle, as well as those of the *Bile* or gall; being two animal fluids which principally contribute to digestion.

The *saliva* is a penetrating soapy liquid, prepared by the glands of the mouth, and the proper solvent which nature employs to soften and macerate our food, the better to assist digestion, as well as to create an appetite; for it has been observed, that those who discharge it too profusely by frequent spitting, have generally a weak appetite and bad digestion.

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After

After long abstinence from food, or in scorbutic habits, where the blood is vitiated, it is rendered somewhat putrid, and will kill or divide quicksilver, like hog's lard, or other unctuous substances.

By changing its nature, it sometimes becomes extremely hurtful, and may be converted into a mortal poison, of which we have the most striking and melancholy instance in the bite of a *mad dog*, where the venom is chiefly lodged in the *saliva*.

The health of *Nuns* and *Monastics* who rigorously enjoin themselves the penance of long fasting, suffers much on that account; for they are often observed to have an offensive breath, attended with looseness of the teeth, sickness at stomach, and giddiness of the head. All those effects manifestly arise from a partial corruption of the animal fluids; and from the same cause the milk of nurses, after long fasting, is rendered yellowish, salt, and nauseous to the infant; inso-much that it either refuses to suck, or having taken it into its stomach, is, from hence
thrown

thrown into a purging, or convulsions. The urine is also rendered high coloured, and its smell rank and fœtid, sometimes creating a strangury or difficulty of making water.

All those disagreeable symptoms are occasioned by the sharp salts, and rank oils, which at other times are carried off by urine; but which being now too long retained, powerfully dispose the animal juices to a state of putrefaction. Animals, therefore, which *die of hunger*, seem rather to perish by a corruption of the blood, or change of its quality, than from a diminution of its quantity; for, in deep consumptions, where the wasting of body is much greater than in those who die of hunger; the patient sustains life, for many months or years, though apparently in an exhausted state.

From what has been said; a circumstance, though strange, becomes perfectly consistent and intelligible, viz. why animals will so long survive, even *twenty days* or more, by the use of *water only*; for, this fluid, refreshes

and purifies the blood, by dissolving the sharp salts and corrupted oils, and, by conveying them off by urine, thus preserves the body.

Hence also may be seen the great advantage of taking fluid, acescent nourishment often, with a view to preserve the purity of the blood; especially in *scorbutic* or *consumptive* habits, where it evidently tends to putrefaction.

From the irritation of the *saliva* on the spongy, nervous lining of the stomach, seems principally to arise that sensation we call *hunger*: When that delicate membrane is therefore shrunk up and destroyed by the immoderate use of Drams or spirituous liquors, or the no less pernicious effect of harsh and nauseous medicines; a loss of appetite will necessarily follow, which never can be restored.

This cause shews how the appetite may differ, according to the different qualities of the *saliva* or spittle; as well as the degree
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of feeling in the nervous coat of the stomach ; why *elixir of vitriol*, or other acids so effectually quicken a languid appetite ; and also why *oily food*, which blunts the acrimony of the saliva, and defends, as well as relaxes the stomach, will relieve that excessive hunger or preternatural craving for food, called a *canine appetite*.

The wonderful influence of the stomach and bowels, in subduing and changing the property of alimentary, or other substances, still appears more evidently, by observing, that some poisons are divested of their malignant property when taken into the stomach, which applied to the open vessels, in a fresh wound, would suddenly have proved mortal.

The German mountebank, who caused an enraged viper to bite a piece of bread, which he eat before the multitude, seems to have been acquainted with this circumstance ; for after seeming to be taken ill, and mimicking convulsions and other grievous effects of the poison ; he took a dose of his *antidote*, and in consequence

consequence of its pretended efficacy, presently recovered.

As the *saliva* irritates the stomach, creates appetite, and helps to dissolve the food; so the *Bile* in the small guts is conducive to the same end, and still further assists in promoting and perfecting digestion.

The *bile* is an animal soap of a yellowish colour, prepared in the liver, as by a large gland, and serves to mix and incorporate the *oily and watry parts of our food*, so as to form a smooth emulsion or chylous liquor, which could not otherwise have been so well effected.

That it possesses a soapy quality is evident by its use among Fullers and Silk Dyers, who employ it, with success, in discharging oily spots and stains. It is endowed with so strong a dissolving power, that the curdled milk in the stomach of a calf, called *Runnet*, is from thence rendered fluid as soon as it passes into the *small guts*; which are supposed by some, to answer the purpose of a
second

second stomach, and to complete what was begun in the first.

This saponaceous fluid may be considered as a kind of *natural purgative* which stimulates the guts, and quickens their motion in expelling the fæces or groffer part of the food.

It may here be proper to observe, that as a want of *saliva* lessens the appetite and impairs digestion; so the bad qualities, redundancy, or defect of bile, produce various disorders of the stomach and bowels, and render the body *costive* or *laxative*: Where the bile is corrupted and abounds too much, it occasions sickness and anxiety at *stomach*, colic pains and a bilious purging; or if from thence, the natural expulsive motion of the bowels is inverted; the bile then flows back into the stomach, instead of passing downwards; attended with sickness, bitter taste in the mouth, and a vomiting.

Whether it offends in quantity or quality, nothing will so much correct it as plentiful dilution and the liberal use of *vegetable acids*.

The

The patient should abstain from oily, or salt meats of the animal kind; and also from beer and other fermented liquors; rough Cyder, Rhenish wine, or old Hock excepted.

A spare vegetable diet, and the plentiful use of pure water, with lemon or orange juice, will afford relief, if regularly pursued for a sufficient time. Lemonade, or imperial water are also proper, together with the use of ripe fruits, such as apples, Kentish cherries, and red currants.

Where the bile is deficient in quantity, too mild or inactive; or so thick and roapy as to obstruct its canal leading to the alimentary tube, an habitual costiveness will follow; and if those depravities are not removed in time, gall-stones may at last be formed in the gall-bladder, or its duct; from which a *Jaundice*, obstruction of the liver, a *Dropsey*, or other *chronic disorders* may ensue.

The gall of animals, particularly that of the eel; pills compounded of *soap* and *aloes*; new milk whey, in which the *herb Fumitory* has been

been infused, and a small quantity of salt of tartar ; together with exercise on horseback, will exalt the qualities of the bile, and render it more fluid and active.

Having considered the office of the stomach, and natural qualities of the *saliva* and *bile* subservient to it, as well as the general disorders arising from their depravity ; it will next be proper to point out the nature and treatment of those prevailing maladies, *want of appetite and indigestion* ; for whether they are originally seated in the stomach from any hereditary or constitutional weakness, or acquired by intemperance, irregularity of the passions, or other causes ; they will lay the foundation of *chronic diseases*, which cannot effectually be taken away, till those complaints in the first passages are previously removed.

The state of the stomach may, in a great measure, be known from the appearance of the tongue ; When that is fresh, florid, and moist, the appetite and digestion are gene-

rally unimpaired ; but, on the contrary, when it becomes dry, harsh and discoloured, attended with thirst and a hot feverish breath ; then it may be supposed that both the stomach and lungs are in some measure disordered.

As *Want of Appetite* is generally attended with a nausea or loathing of food ; so *Indigestion* is accompanied with swelling and oppression of the stomach, a disagreeable taste in the mouth partaking of the food, sour eructation or belchings, and heartburn ; flushings in the face, and a slow hectic fever.

From whatever cause the stomach is deprived of its natural faculty ; it may be laid down as a general rule, that abstinence from solid food will afford the most relief ; for, by adapting the quantity of aliment to the power which is to digest it, the stomach will be less overstrained and oppressed. Besides, the air expelled from it being from thence proportionably less, its weak fibres will be less on the stretch, and the sooner restored

to

to their natural state ; every part of the body having a tendency to contract and acquire strength, when freed from the injury or violence it had before sustained.

By such means, the patient will also avoid the inconvenience of sleepiness, and oppression, palpitation of the heart, flushings in the face, with hectic heats, and other symptoms after eating, so oppressive to the weak and delicate.

The propriety of spare diet to such women will appear necessary, as they use less exercise and perspire more moderately than men ; and also because their solids are more lax and delicate, and their digestion naturally weaker. But it will not be requisite further to enforce such rules and cautions, as women very seldom fall into errors of diet, offending in quantity ; they are much more apt to indulge a whimsical appetite for food which is hurtful in quality.

The stomach and bowels being largely supplied with nerves and blood vessels, and

endowed with the most exquisite sensibility, are, therefore, liable to many disorders; as well as from the very nature of their daily office; for, the aliment which is constantly passing through their cavity, may offend and disagreeably affect them, either by its excess of quantity or bad quality. The first will overstretch their tender fibres, and create pain; the last, by its sharpness or malignity, may wound or corrode their spungy, nervous lining, and occasion *colic pains, inflammation,* and even a *mortification*.

From this nervous fabric of the stomach, it becomes so susceptible of the violent passions of the mind, that grief, anxiety, or the slow consuming passion of love, which prey on the spirits, and suspend the nervous power, will not only soon destroy both *appetite* and *digestion*, but also induce universal languor, with sickness and oppression at stomach, succeeded by disorders of the bowels, a *fever* or *melancholy*.

The

The sudden suppression of the menses, bleeding piles, or eruptions repelled from the surface of the body, have also been observed to disturb digestion ; and *gouty*, *scorbutic*, *scrophulous*, or *venereal matter*, falling on the stomach, not only immediately destroy its power, but produce symptoms of great violence, which sometimes endanger the patient's life.

Taking cold, especially in the feet, is also injurious to the appetite, by throwing a load of perspirable vapor upon the bowels. Strong vomits, purges, or other violent medicines, also greatly injure these parts ; and the immoderate use of *Tea*, or other liquors, constantly taken warm, have likewise been found greatly to impair the action of the stomach, by macerating and weakening its fibres.

Habitual costiveness, which obstructs the alimentary tube proceeding from the stomach, is also an enemy to digestion ; because, when the bowels are overloaded with their contents,

tents, the stomach will necessarily become oppressed and deficient in its office:

But of all the evils which exert their baneful influence over the *stomach*, none is so pernicious in its consequence as the use of *Drams*, however veiled under the elegant names of *Parfait amour*, *Bouquet de Venus*, &c. Such spirituous compounds, like liquid fire, will harden and contract its fibres, and as it were, cauterize and crisp up its tender, nervous lining, so as at once to destroy both feeling and appetite.

For this reason, those addicted to the shameful habit of dram-drinking, are always complaining of a *cold stomach*; which, in fact, is rendered such, by the very means they preposterously make use of to relieve it; and constantly repeat to the slow, but sure destruction of their constitution.

Besides those bad effects of spirituous liquors, they harden the animal food taken into the stomach, and render it indigestible: By this property, birds and other fleshy substances,

substances, are preserved from putrefaction for the use of the curious. From the same heating power they contract the glands, coagulate their juices, and rob the stomach of that natural moisture, which is essentially necessary to digestion : In a word, *Spirituos Liquors* are so destructive to the stomach, that they totally divest it of all feeling and vital heat.

By such means, the faculties of the mind, as well as those of the body, are equally injured and impaired ; for, those who debase themselves by this sordid gratification, are constantly troubled with sickness at stomach and sinking of the spirits ; a stupor, confusion of ideas, loss of memory, and a nervous tremor.

The finer feelings which render women most lovely, are thus insensibly weakened and subdued ; every moral virtue loses its power ; every relative duty is neglected or forgot ; and at last, so great are the inroads of this destructive habit upon the mind, that *every vice may enter.*

As

As scarcely one can be found, who has been reformed of this fatal custom, how cautiously ought it to be avoided?

I have seen, with the deepest concern, several instances of women, otherwise amiable, who have fallen *victims* to the slow consuming poison of *Spirituuous Liquors*, secretly conveyed by nurses, or servants, into the lying-in bed chamber of the patient, on pretence of their being *cordials*: But such cordials, though pleasing to the taste, in their final effect will be found more bitter than gall! They will prey on the vitals, and, like the fascinating *Cup of Circe*, transform the human shape.

“ Who knows not *Circe*,
 “ The daughter of the Sun? whose charmed cup,
 “ Whoever tasted, lost his upright shape,
 “ And downward fell into a groveeking swine.

MILTON.

The stomach and bowels may also be injured by any violent irritation applied to their
 tender

STOMACH AND BOWELS. 201

tender, internal surface, particularly by *Worms*. The effect of violent pressure, as that of *narrow stays*, or sitting with the body almost half double, a position which will hinder the circulation of blood through their vessels, and by deadening the nervous feeling, will impair their power and produce *costiveness*, want of appetite and indigestion. Though fortunately for women, the pernicious custom of *tight lacing* does not now prevail, it may be proper to mention other bad consequences arising from it, least it should again come into use.

By strangulating the vessels and interrupting the course of their blood, it will occasion an unequal distribution of that fluid; hence the external parts being deprived of their natural quantity, will waste, and being thrown out of their proper direction, by the force of pressure, crookedness and deformity will follow.

Since the blood, under such circumstances, cannot circulate freely on the surface of the

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body;

body ; the more delicate internal parts, such as the *lungs* and *brain*, will become overloaded with it ; hence, inflammation of the first, and from the last, stupor and head-ache ; also tightness and oppression of the stomach and breast, with a strong, feverish breath, a cough, ulceration of the lungs, and spitting of blood, which may end in a *consumption*.

However extraordinary these circumstances may appear, they are all clearly deducible from the natural structure and use of the affected parts ; and must be obvious to every one of attentive observation.

Vomiting and purging medicines after violent anger are attended with dangerous consequences ; eating or drinking immoderately upon violent exercise, or disturbance of mind, are also equally pernicious.

Vomiting arises from an inverted convulsive motion of the stomach, by which its contents are thrown up, instead of passing downwards. *Purging* is produced by some particular irritation of the bowels, which preternaturally

ternaturally increases their expulsive motion downwards. *Nausea* and *vomiting* only differ in degree, for both imply some disagreeable impresson on the stomach, which is most violent when the last of these effects is produced.

A warm, moist, or pestilential state of the air, putrid exhalations from animal or vegetable bodies, the fumes of melted lead and other metals, or noxious vapours arising from mines or caverns, will also disagreeably affect the stomach and bowels, and abate their natural energy.

From what has been said, it follows, that such, and so great is the sympathy between the stomach and different parts of the body, that they alternately communicate their sensations to each other. Thus local disorders of that organ, will, at length, produce obstinate *chronic diseases*, in consequence of indigestion, and a crude chyle, which impoverishes the blood, and renders it unfit for the nourishment of the body, and the several

purposes of life ; hence, the *Gout* and *Scurvy*,
a *Dropsy*, or *Consumption*.

On the contrary, although the stomach was before in a sound state ; should the mind become deeply affected with grief or anxiety, or the internal parts attacked by gouty or other morbid matter, all appetite and digestion immediately cease ; pain, sickness and vomiting are brought on, and sometimes attended with dejection of spirits, melancholy, or even despair.

Hence also may be understood, how *chronic diseases* at first impressed on the mind, and acting by sympathy upon the vital parts of the body, may, in the conclusion, bring on *convulsions*, *bloody flux*, or other acute diseases, of which I have expressly treated in a former work.*

In short, those who mean to remain free from *chronic* or slow diseases, must avoid the general causes which weaken the digestive power

* *Practical Observations on the Acute Diseases most fatal to Women.*

STOMACH AND BOWELS. 205

power of the stomach, where their first foundation is laid.

If *Digestion* suffers from violence of the passions; nothing will so much divert and call off the mind's attention from the cause of its distress, as chearful company and travelling; if from a suppression of the menses or bleeding piles; the patient may be treated in the manner directed for those disorders.

When *Irruptions* or breakings out, which nature, for her relief, had thrown on the surface of the body, are from thence repelled and driven back upon the bowels, attended with sickness, and colic pains; the immediate use of the warm bath, and plentiful draughts of mint or sage tea, and the addition of *Nitre* will assist in promoting a free perspiration: Should the pain continue violent, a gentle laxative mixture with manna may be given, and if necessary, the opiate pill, no. 50, to quiet the bowels, and procure rest.

Should the stomach be affected with *gouty*, or rheumatic humors, producing sickness or vomiting

vomiting; blood may be taken away in proportion to the strength and violence of the symptoms; after which, a *tincture of aloes* and *gum guaicum* may be administered, as at no. 51; the feet should be put into warm water, pimento tea may be taken for common drink, and if the weather is severe, a flannel shift may be worn next the skin; but should difficulty of breathing come on with fever and delirium, blisters should be applied to the inside of the legs and arms.

The inconveniences arising from *Costiveness*, where the bowels are too weak and inactive, are most effectually remedied by exercise and the *Peruvian bark*, rising more early in the morning, and the use of the cold bath. Where the bile is defective in quantity; equal parts of *aloes* and *soap* may be taken in pills; but on the contrary, if they are tender and irritable, as generally is the case when the patient labours under distress of mind; then an habitual diarrhœa or looseness prevails, which exhausts the patient's strength, and is extremely difficult of cure;
without

without the cause from which it proceeds can first be taken away.

Innumerable almost are the complaints of the bowels, arising from *Worms*, to which women are more subject than men, for the same reason that children are much more troubled with them than either; namely, from a want of sufficient digestive power in the stomach to destroy the texture of those reptiles in their first state; that is, when deposited in the stomach and bowels in the form of eggs.

For this reason, *millepedes* or hog lice, coiled up in their coat of mail like a pill, and swallowed alive, have been found in the same state after death, and also have been vomited up many days after they had been taken; which shews the absurdity of giving them in such a manner; for as they prey on garbage, they may produce on the human body all the bad effects of worms.

Worms are chiefly of three sorts, namely, *Ascarides* or small white worms, which
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are generally confined to the *rectum* contiguous to the fundament; the long round worms or *Teres*, which infest the small guts or stomach; and also the *Tænia* or tape worm, more dangerous and destructive than all the rest.

The two first sorts may be effectually destroyed by *mercury*, and the last by *powdered tin*, or the root of the *male Fern* reduced into a powder, and taken as at no. 52; which last is the celebrated remedy of *Madame Nauffer*, which she used in France after the death of her husband for the space of twenty years, with the most happy and extraordinary success.

The great bastard *black bellibore* or *bear's foot*, *Indian pink root*, *cabbage tree bark*, and *cow itch*, are all powerfully destructive to worms, but ought to be used with caution.

The waters of *St. Shad*, near the founding hospital in London, and those of *Harrowgate* in Yorkshire, are also effectual remedies in the like cases.

The

The general symptoms of *worms*, are, a wan, sickly complexion, itching of the nose, starting in the sleep, and convulsions. The appetite is deficient at one time, and voracious at another; attended with pinchings in the bowels, and a looseness; swelling of the belly, strong, disagreeable breath, a short, dry cough, and faintings.

Worms, if not totally destroyed, will soon renew that breed. This is best prevented by mixing purgative medicines with those already mentioned, which will deaden their power and carry them out of the body, before they have had time to revive.

The most effectual methods to prevent them from generating and collecting again, will be to strengthen the stomach and bowels with calybeat bitter wine; a strong infusion of Peruvian bark; or by directing the use of *Lime water* to be continued for a considerable time: The patient should also now and then drink a glass of generous wine, such as *Madèira* or old *Hock*.

Æthiops mineral, which is a composition of mercury and flowers of sulphur, is not so efficacious as mercury divided with conserve of roses, or mucilage of gum arabic ; for, in the first preparation, the mercury by being united to the sulphur becomes fixed and inactive ; so that if worms are destroyed by this medicine, it seems owing to the sulphur alone : And indeed, the efficacy of the Harrowgate water, which is strongly impregnated with sulphur, shews its extraordinary power in such cases.

Dead worms, in abundance have been evacuated after malignant fevers ; a proof that the corruption of the juices which then prevailed in the body was uncommonly great.

The *mucus* or slime, supposed by some to breed worms, is not the cause but effect of those vermin ; being nothing but the glue of the guts immoderately discharged, in consequence of their irritation ; similar to that occasioned by snuff which stimulates

mulates the nose to a preternatural discharge; or to the thick, roapy fluid, voided with the urine, from the pain of a stone in the bladder; for, no animal bodies how abject or minute soever, can be produced without the concurrence of sexes: Those gross humors or putrid substances, only afford them a proper *nidus* or hatching place.

It is a circumstance somewhat mortifying, that worms are not confined to the bowels, but that they sometimes have their residence in other parts of the body, even in its solid, or fleshy substance. I once attended a gentleman, then just returned from *Guinea*, in whose legs were found small worms upwards of a foot long, resembling a fine white fiddle string.

Livid pimples, attended with violent itching, appeared in several parts of his legs and thighs, which when broke, this extraordinary worm came forth, and being secured upon a piece of twisted paper, was gradually rolled up every day, till the whole was at last extracted.

A case of this kind is mentioned by *Dr. Mead* in his medical cautions. He describes this worm as an aquatic insect, with a sharp head and slender body, which works itself into the flesh of those bathing in the water; and is most commonly found in *Africa* or the *East-Indies*. This worm is also particularly mentioned by *Avicenna*.

Almost all the various disorders of the *stomach* and *bowels*, especially those which are *chronical*, however distinguished by various names, may be comprehended under the general causes already mentioned; and it was not my design to treat of such as were *acute* or *inflammatory*.

Those of a delicate habit, and sedentary, inactive life, are of all others the most subject to frequent fits of the *colic*, after eating, agitation of mind, or sudden changes of the weather; which indicates a bad digestion, great sensibility of the nerves, and a weak, infirm state of the stomach and bowels.

Instead

STOMACH AND BOWELS. 213

Instead of the frequent use of peppermint water, spirituous liquors, or cordial drams which only afford a momentary relief, but never cure; the patient should be careful not to err in the quantity or quality of her food: She should keep her body laxative, abstain from all fermented liquors, and confine herself to toast and water for common drink.

The stomachic pills, no. 53, may be taken occasionally, and the aromatic plaster, no. 54, may be worn on the *pit of the stomach*, which answers to the very center of that organ; and for this reason *volatile liniments*, *aromatic bags*, and such other external applications as invigorate the nerves of this part, by their grateful and subtle odor, have been found of real service.

The region of the stomach is much oftener the seat of *chronic diseases* than has generally been imagined: Agreeable to this opinion, we find, that plasters with myrrh, and the warm spices applied to this part, have frequently
removed

removed agues and intermittent fevers, as well as some *nervous* and *hysterical disorders*; which could not have happened, had not that organ been principally affected.

But was it necessary to shew that the qualities of subtile medicines pervade the pores, and sensibly effect the stomach and bowels; we could not have a more convincing proof, than from the application of *aloës* and *bitter apple* to the navel or stomach; which, in this manner, will not only effectually kill worms, but also sometimes occasion a violent purging.

Those who are subject to tedious habitual colics, and are liable to pinchings in their bowels, from taking cold in severe weather, or other causes, will find great relief by wearing a fine *flannel shift* next the skin; and when their complaints are a little abated, the tincture of *Peruvian bark*, no. 55, with *Bath water*, and moderate exercise in a dry, clear air, will bid fairest to prevent a relapse.

When

When the pain of the bowels is excessive, arising from wet cloaths, or taking cold in the feet; emollient clysters may be directed, and bottles filled with hot water, wrapt up in flannels, may be applied to their soles with great relief to the patient.

Plentiful dilution, with an infusion of the flowers of elder, or sage tea, will be proper to raise a gentle perspiration. If the pain should continue excessive and denote danger; an opiate may be given, and blisters applied to the inside of the legs, which, though severe, is yet a safe and most effectual remedy, in particular cases of this kind.

I have observed that weak, sedentary people have generally a slender appetite and digestion, attended with oppression of spirits, and a train of nervous disorders; and on the contrary, when the stomach is sound, and the bodily strength good, so are appetite and digestion. The circulation of blood is then brisk and free, the spirits lively, and all the natural discharges being regularly carried on; no gross humors, or unsound juices, will be retained

retained in the body to the prejudice of the constitution.

Those things premised, it is evident, that *whatever remedies increase bodily strength, will most powerfully assist digestion*; and consequently, that a cool, dry, and pure air, with moderate exercise will prove the best of all *stomachics*: They will effectually promote *animal heat and circulation*, which regulate the use of the several *vital parts* and support all the natural discharges of the body.

Few, I believe, will doubt this assertion, who attend to the difference of their spirits and appetite in a frosty, clear day, when they use exercise without doors; compared to what they experience in warm, damp weather, when they indolently sit still within, and breathe a confined air.

It may, therefore, be truly said, that *fresh air and moderate exercise* in restoring a lost appetite, and promoting animal digestion, are superior to every thing else; for although Peruvian bark, steel, bitters, and the cold bath, are
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all most excellent remedies; their efficacy is greatly increased, and their effects rendered much more permanent, by the assistance of those natural benefits; without which they are seldom found to produce a lasting cure.

In a word, such is the potent aid of nature, that she disclaims all superficial and inadequate helps, and seldom wants more than the vigorous exertion of her own salutary powers, joined with *mild and simple medicines*, to free the body from such *Chronic Diseases* as proceed from a fault of the stomach and bowels.

SECTION X.

Of Nervous Disorders, Hysteric Affections, Low Spirits and Melancholy; their Treatment and Cure.

THE word *Nervous* has been so vaguely and indiscriminately applied, that it is necessary to ascertain the complaints which are truly such, and to distinguish them from others improperly so called.

Those disorders may be deemed nervous, where, from an *original* fault, or *infirm texture* of the nerves, they become disagreeably affected by slender causes, which produce no such sensations in others whose nerves are in a sound and natural state.

Instead of regarding this simple distinction, almost every disorder accompanied with weak nerves, has improperly been called *nervous*: But in this general and indefinite sense, all diseases may be called so; for the

the nerves being the most susceptible parts of animal bodies, must always suffer in proportion to their degree of feeling.

Such complaints being only symptoms or consequences of preceding diseases, cannot with propriety be called *nervous*, any more than a person may be said to be in a deep consumption, after a severe fit of illness which had reduced him to skin and bones.

Before we proceed further, it will be necessary to explain in a simple manner the nature of those bodily powers which constitute the very *principles of life*.

The human body is sustained and kept alive, by three principal powers, which like the movements of a clock or watch, co-operate and assist each other: The first is the *Brain*, and *nervous system* proceeding from it, the grand source of all sensation; the second is the *Heart and arteries*, or blood-vessels, which give motion and circulation to the blood; and the third is the *Stomach and bowels*, which prepare the aliment

and supply nourishment for those, as well as all the parts of the body.

In speaking of *digestion*, it was remarked, that the stomach loses its power when deprived of *nervous influence*; and we should here take notice, that the regularity and vigour of the heart's motion chiefly depend on the same cause.

As therefore the *Brain and nerves*, the *Heart and arteries*, and the *Stomach and bowels*, are the principal instruments of all sensation, circulation, nutrition, life and motion, and the very agents which govern and direct the whole animal machine; it will necessarily follow, that when any one of them becomes disconcerted and put out of order, the vital functions of the body depending upon them must then be unduly performed.

“Where one link's broken, the whole chain's destroy'd.”

Such is the extraordinary sympathy and intercourse between those several organs, that like so many little provinces, allied by mutual interest, not one of them can exercise its
full

full power without the concurrence of the rest ; for as the Heart and Stomach cannot act without the assistance of the Brain, or the Stomach digest without receiving a due quantity of blood from the Heart ; so neither can the Heart have sufficient force to keep up the circulation without a continual supply of nourishment from the Stomach ; or even the Brain itself exert its influence over those organs without being duly nourished by both.

But besides those, as well as the *action of the lungs*, there is a more latent principle of life, called *Irritability*, which does not depend upon either of the former powers, since it continues to exist in the body, after all *sensibility* and *circulation* are gone, and every vital principal, but itself, totally extinguished and destroyed.

By *Irritability* is meant that property of the animal fibre, which, on being pricked or stimulated, has a power to contract and shorten, even after an animal is dead ; for
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the Heart, which is the most irritable part of the body, may be excited into motion even after the head has been cut off; hence we may conclude that Irritability is not only independent of *sensibility* and *circulation*, but even of the soul itself, being found to exist after the brain, the seat of that *spiritual something*, has been destroyed or taken away.

As therefore Irritability is a property residing in the animal fibre, from the peculiar structure and nature of its parts, and as it is the latest in taking leave of the body; so we may with equal reason suppose, that it is the *first vital principle* which gives commencement to animal life.

It seems not a little surprizing that so extraordinary a property, essential to some vegetables as well as animals, as appears by the *Sensitive Plant*, should so long have remained unattended to by physiologists and philosophers, even when obvious to the eyes of the vulgar; for butchers and others have long observed the *trembling or palpitation* of flesh
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in slaughtered animals, when stimulated or gently touched. Dr. *Glisson* was the first who made use of the word *Irritability*; but we are indebted to the celebrated *Baron Haller* for the discovery of its genuine properties, as well as for pointing out the essential difference between it and *Sensibility*, with which it has so often been confounded.

The inferences arising from this important discovery, so far as they are conducive to explain the nature of *nervous or hysterical disorders*, or throw additional light on their cure, I shall lay before the Reader with more pleasure, as the subject is both *new and instructive*.

Experiments shew that the degree of *Irritability* is in proportion to the firmness and consistence of that *mucus* or glue, of which the whole solid system of the body is originally made up: Whatever therefore hardens the consistence of this animal jelly; as cold, exercise, acids, and the like, diminish *Irritability*; and on the contrary, the dissolving

solving power of heat and moisture are found to increase it. Age, which also hardens the fibres, relieves some diseases more effectually than medicines ; as flushing in the face, nervous tremors, hysterical or epileptic fits, and scrophulous complaints about the time of maturity.

I have observed that those of lax fibres, and delicate, hysterical habits, are thrown into a flurry of spirits from the most trifling causes ; and that such impressions made on the female sex, are often followed by pain in the bowels, a diarrhæa or fever : In some they occasion an obstruction of the menses, in others, their excessive discharge, and sometimes a flooding in those who are pregnant.

The immediate cause of such effects have been attributed to an explosion or inordinate motion of the animal spirits, and such like unmeaning and chimerical notions ; but the true cause seems entirely to arise from *too much Irritability*, joined to an *excess of nervous feeling*, which generally prevails at
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the same time ; and, like the former, proceeds from want of sufficient firmness in that animal glue or cement which *constitutes the nervous coats*, as well as every part of the body.

Consistent with this observation, we know that long continued illness, profuse evacuations, or whatever diminishes the strength of the body, disposes it to a preternatural degree both of *Irritability* and *Sensibility*.

As old age approaches, the *mucus*, or animal glue at last becomes so firm as to lose its former Irritability ; hence a want of motion, or paralytic numbness in the body, and at last, death itself.

This circumstance is sufficiently confirmed by observing how the muscular fibres which were very irritable in infancy, gradually become less so, as they are rendered more compact and tendinous from the effect of age. It also shews why those who have weak *stamina* in youth, grow stronger as they advance in years ; likewise why they do not so suddenly

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become old as those of stronger habits, and why they are less subject to *acute diseases* arising from a firmer state of the fleshy fibres.

Upon the vast degree of *Irritability* with which the skin and bowels are endowed, we are able to account for the surprizing success observed of late in *restoring drowned people to life*, by rubbing the surface of the body with *salt*; and injecting the smoak of *tobacco* by way of clyster: From the acrid quality of such applications, and their effect on those irritable parts, the several vital organs of the body are brought into consent, and rekindle the latent sparks of life.

On this principle only, we may comprehend, what before seemed mysterious beyond the possibility of finding out; namely, how such applications should act on the body almost stiff with cold, and void of all feeling, and motion. We have already remarked that the *organs of motion* differ from those of *sensation*, and that the first are susceptible on the
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mere principle of *Irritability*; consequently, we may conclude, that when people apparently dead are restored to life, by the means already mentioned, the applications then used, *can only act on the irritable parts*; for the nerves, which before were sensible, are now totally *void of all feeling*.

Here, I must beg leave to remark, that this circumstance fully confirms an opinion which I formerly took the liberty to advance as *new**, viz. *That Irritability is the first vital principle which gives commencement to animal life*; accordingly, we find that in such cases, as soon as the irritable fibres of the skin and alimentary tube are roused into motion by acrid applications, and act like a main spring, the wheels of life are then turned round, and the body begins to revive.

Having considered the property called *Irritability*, it will next be requisite to speak of *Sensibility*; and the better to comprehend the

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* *Lecture introductory to Midwifery, 3d edition, page 9.*

true nature of *Nervous Disorders*, also to shew what the nerves are, from whence they proceed, and what is their particular office in the bodily system.

Every *Nerve* may be considered as a cylindrical cord, made up of two distinct substances, viz. of a medullary part, or *marrow*, and of a fine *membranous covering*, both which are derived from the *Brain*.

By experiments made on the Nerves of brute animals, it appears that all their feeling resides in the medullary part; and that the membrane with which they are invested, is void of sensation, only serving as a defence or covering to preserve the delicate substance of the first from the violence of too strong external impressions.

These slender nervous cords are so distributed, and uniformly diffused over the body, that the point of a needle cannot be applied to any part of its surface without wounding some of them: In the skin, they are spun out to such exquisite fineness as to become
invisible

invisible to the naked eye, and therefore chiefly manifest their existence by their great sensibility.

Although it will hereafter evidently appear, that the *Nerves* are the immediate organs of all vital motion and sensation, and the medium by which impressions made on the body are instantly conveyed to the mind ; yet the precise manner by which this mysterious intercourse is carried on, remains a secret in nature with which, perhaps, we shall never be acquainted.

Those things premised, and duly attended to, it will follow, that so long as the fine, membranous covering of the nerves is sufficiently compact, they will remain in a sound state ; but on the contrary, when from any cause it loses its natural firmness, then the marrow or sensitive part of the nerves, being as it were thinly cloathed and exposed, will feel, too strongly, such impressions as are made on the body or mind.

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Hence, such causes as would not create pain when the nerves were in a natural state, cannot be endured without symptoms of great violence; namely, palpitations of the heart, choaking in the throat, a nervous trembling, and faintings.

This delicacy of texture in the coats or coverings of the nerves, is by far the most obvious and general cause of such nervous disorders as arise from simple weakness; which the son derives from the father, and communicates to his offspring as naturally as his features or complexion; such people may very properly be said to have weak nerves, and to labour under the distressing sensations already mentioned.

Nervous Disorders may therefore arise from constitutional or hereditary weakness, or may be acquired by whatever impairs the natural strength of the body, as tedious diseases, the *redundant menses*, or *profuse fluor albus*, *intemperance* and *irregularity of the passions*. An indolent inactive life, and
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AND HYSTERIC AFFECTIONS. 231

continual residence in low situations, where the air is warm and moist, will also dispose the constitution to maladies of the nervous kind.

So intimately connected are the body and mind, and such their correspondence, that impressions made on the one naturally influence the other with the like feelings : Thus, by *immoderate grief*, the digestive faculty of the stomach is impaired and taken away ; and by a blow on the head which injures the brain, the soul is as it were dethroned, and losing its empire over the body, all sense and motion are instantly destroyed.

The mind or intellect, whilst confined to the body, “ *that muddy vesture of decay*”, is obliged to stoop to the state and condition of the nerves, whose feelings are liable to alteration from a thousand accidental, and unavoidable causes, so as to occasion diseases ; or being totally abolished, to produce instant death. Those, as well as many other circumstances, concur to prove that the faculties and disposition

sition of the mind, in a great measure depend on the bodily organs with which they co-operate, and where those are changed from their natural state, so are its appetites and operations.

The nervous feeling of the stomach is often so much changed by age, that things grateful to it in the infant state, become disagreeable in a more advanced life. Upon the same principle, the depraved appetite, or *preternatural longings* of women with child can only be accounted for: In the pregnant state, a new system of vessels are formed, and a new circulation set on foot for nourishing the child; and in consequence of this mechanical change, the nervous feeling is altered, and sometimes directs the appetite to things which were even disagreeable to it before.

How different is the state of the body and mind when the vessels are empty or full, viz. after long fasting, or a plentiful meal; in the first, the pulse is weak and unequal, the complexion pale, the body languid, and the spirits desponding:

desponding : But after eating and the moderate use of wine, the springs of life are wound up, and the body and mind are restored to their native vigour.

However, in cases of excess, the clear and distinct exercise of the reasoning faculties is impaired, the perceptions are more dull, and the mind less fit for study or deep meditation. We may also here remark, that action of mind on the body is just as apparent ; for the timorous or irresolute, even women and children, when enraged by passion, become more void of fear than before.

Was it necessary farther to prove the sympathy between the body and mind, and to shew that every particular alteration of the first, produces correspondent feelings in the last ; it might be illustrated and confirmed by those sensations peculiar to a change of constitution at the age of puberty, which influence the two sexes in favour of each other, even to infatuation and madness.

All *sympathy* as well as motion entirely depend on the feeling or sensibility of the nerves ; but although they communicate motion to other parts, they are not at all irritable, and consequently destitute of motion themselves ; a circumstance truly wonderful.

The consent between the Brain and Heart is remarkable ; for, intense study or thinking quickens the pulse, and a sudden fright will occasion palpitations or a convulsive struggle of the heart, even sometimes to a mortal suffocation : In both these cases, the first impression is made on the brain, and the heart, like a faithful companion, suffers by sympathy ; but whether the Nerves act as *tubes*, or *vibrating cords*, like the strings of a musical instrument, or whether they serve as conductors to some subtle fluid, similar to that of *electric fire*, we are wholly ignorant.

Nervous influence, like attraction in the *load-stone*, or Irritability in the *sensitive plant*, may therefore be considered as a property resulting

sulting from matter, according to the peculiar modification of its parts, in itself utterly inexplicable, and of which we can know nothing, except from its effects.

As the blood-vessels proceed from the Heart, which is the instrument of circulation ; so the Nerves, as already observed, are derived from the Brain, the great source of all Sensation. We know by feeling the pulse, that the action of the Heart actuates the motion of the blood ; and it is no less evident, that the influence of the Brain governs and directs all the feelings and perceptions of the body and mind ; impressions for example, made upon the last by excessive grief, or sudden terror, produce symptoms of great violence, and even death itself ; and the cold air admitted to the naked nerve of a decayed tooth, will feelingly persuade us, that the body as well as mind may suffer by the mediation of the nerves,

The Brain seems therefore to the nerves, what the Heart is to the blood-vessels or ar-

teries; for too violent a degree of action in the last, will produce heat and increase circulation, as may be observed after violent exercise, or in the time of a fever: In like manner, when the power of the Brain and nerves is too violently impressed on the body or mind, their sensations will be rendered too quick and exquisite; like the motion of a watch which becomes rapid and irregular when the main spring acts too strongly on the several wheels and subordinate movements.

Impressions made on the mind will often totally subdue those of the body; and on the contrary, such as are made on the body will remove those of the mind; all which may supply an intelligent observer with useful hints in the cure of such diseases as have been unsuccessfully treated by medicines.

Habitual *convulsions*, for instance, have sometimes been cured by the unexpected explosion of a gun, or the sudden outcry of
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fire in the dead of night; the *hiccough* may be stopped by a sudden surprise, and the approach of an *ague fit* has been prevented by the same cause.

The most extraordinary case, which perhaps was ever produced to shew the wonderful influence of the mind over the body, as well as the power of sympathy, is related by *Kaau Boerhaave* to the following purpose.

A girl at *Harlem* in Holland, on being frightened, fell into strong convulsions, and to the astonishment of the physicians there, those who crowded in to her assistance, or from curiosity, were immediately affected in the same manner. As the most powerful medicines were prescribed without any sort of relief; at last, the celebrated *Boerhaave* being sent for, determined to try the force of fear upon the imagination: accordingly, he ordered a *formidable apparatus* of furnaces with burning coals, and hooks of iron, to be placed before those who had been thus affected :

ted: He told them that since medicines had failed, there was no other remedy but that of burning the arm of the first person affected with a *red hot iron* down to the bone. In consequence of this they were struck with such exceeding *terror*, and so resisted with all their might the approach of the convulsive fit, that not one of them was seized with it afterwards.

It may be equally proper to mention another particular case of a contrary nature to shew the *power of the body on the mind*. Dr. *Robinson* in speaking of hypochondriacal melancholy, expresses himself in the following words.

A very worthy gentleman, on whose fidelity I may safely rely, assured me, that he perfectly knew a person, who for several years, had been melancholy mad, and who in one of his frantic fits, flung himself out of a window three story high, but accidentally pitching upon a *draw well*, he fell plum down into the water; and being taken up,
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AND HYSTERIC AFFECTIONS. 239

was perfectly recovered to the use of his senses. It was computed he fell near thirty fathom before he came to the surface of the water, and the well was about six fathom deep under water.

As we have seen, that different passions, sensations, and appetites, at different periods of life, can only be accounted for from a change of constitution, which *changes the nervous feeling*; so it will appear less surprising, that even diseases themselves, especially those of the *Brain and Nerves*, should sometimes be cured by the same cause; in consequence of age, or a more immediate accidental impression on the body or mind, like those extraordinary ones already related.

In proportion as the solid parts of the body are more or less firm and strong, or lax and weak, the nervous system will participate of the general habit, and become more or less endowed with sensibility.

For this reason, weakly women and children, in whom the membranous covering of
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the nerves is too soft, thin and delicate, are susceptible of slender impressions, from pain, or sudden fear; so as to produce paleness of the face, palpitation of the heart, convulsions, or other violent symptoms: On the contrary, robust men and old people, whose nerves, in common with other parts of the body, are hardened by the effect of age, are much less subject to such excessive emotions, their nervous feeling being not so vivid and acute.

Tender bodies, like the first, may be said to be “*tremblingly alive all o’er*,” and like wax, to receive too deep an impression from external or internal causes. Women, therefore compared to men, are much more subject to nervous disorders, both from their natural delicacy of frame, and a more reclusive manner of life, which deprives them of the benefits of exercise in the fresh, open air.

Nervous Disorders, thus arising from simple weakness, are always attended with
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a preternatural degree of *Feeling* and *Irritability*, and can only be effectually cured by such means as *give more strength and firmness to the whole bodily system*; in consequence of which both those properties will be proportionably diminished.

The progress of age which gradually imparts strength to the nervous threads interwoven with every part of the bodily frame, will therefore sometimes greatly assist in the cure of *nervous* and *hysterical* complaints arising from weakness.

Hence it may reasonably be concluded, that moderate *exercise* in a dry, pure air, the liberal use of *peruvian bark*, with the iron waters of *Spa*, *Tunbridge*, or *Islington*, and also the *cold bath*, are the principal remedies to be depended upon in this species of nervous disorders, as they are all known to strengthen the body; and on the contrary, that *bleeding*, *vomits*, *strong purgatives*, the immoderate use of tea, or a sedentary life in warm, moist air, will be highly pernicious.

Old Hock and Rhenish wine, or fine *London Porter*, deservedly called English Burgundy, drank in moderate quantities, will all be found of real service in such cases, as experience has repeatedly informed me.

In nervous, or hysteric complaints, attended with head-ache, thirst, and feverish heats, the calybeate or iron waters and bitters are less proper; on the contrary, a strong infusion of peruvian bark with the sweet elixir of vitriol, may be taken twice a-day; also a glass of pure, cold spring water, night and morning.

The heating gums, as assafoetida, sagapenum, &c. or musk, castor, and the like, are most proper when the pulse is low, and the patient free from thirst and fever; but in fact, such vegetable or animal substances do not act by strengthening, but only irritating the bodily system by their fragrant odor; and therefore, may be looked upon as so many *dry drams*, which seldom produce a salutary and lasting effect.

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The Nerves, like other parts of the body, are nourished by blood-vessels, and consequently liable to inflammation, which will increase their sensibility, and may occasion pain, delirium, or madness: This circumstance is more fully exemplified by inflammation of the eye, or ear, which will so increase their nervous feeling, that light and sound, before producing their natural effect on those organs, without pain, will now become intolerable.

On the other hand, when the nerves are rendered too firm, and insufficiently supplied with blood, as in extreme old age; their sensations are deadened and impaired; the stomach will therefore lose its natural power, and the bowels their expulsive force, hence indigestion and habitual costiveness; a paralytic numbness of the limbs will follow, the sight and memory begin to fail; all the passions, save that of *avarice*, are in a manner extinguished, and,

————— “last scene of all,

“That ends this strange eventful history,

“Is second childishness, and mere oblivion.”

SHAKESPEARE.

The first of those nervous maladies being inflammatory, may be relieved by bleeding, gentle evacuations, and spare diet : The last, without the magic art *Medea*, is in its own nature utterly incurable.

Besides those general causes of nervous disorders arising from simple weakness; there are some others of a more violent and particular kind, proceeding from *diseased humors* in the blood.

Thus, for instance, *breakings out on the skin*, suddenly driven back, and the over-hasty closure of issues or old sores have been succeeded by nervous symptoms, which immediately ceased as soon as those discharges were again restored.

In like manner, such disorders have been known to follow *gouty complaints* which suddenly went off without any regular fit, but on the return of such diseased humors to the hands or feet, the nervous symptoms were immediately relieved. An *obstruction of the menses*, or sudden stoppage of the bleeding piles, have sometimes had
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the like effect; also a *venereal taint, scorbutic humors*, or those arising from the *scrophula* or king's evil. This particular class of nervous disorders is often attended with very violent symptoms, in consequence of injury done to the Brain and nerves by such *offending humors*; hence also *hysteric* and *epileptic fits*, *low spirits* and *melancholy*; which can only be effectually removed, by taking away the original morbid cause.

In such cases the nerves themselves are not in fault, but only suffer in consequence of those latent latent diseases, which must, if possible, be *cured according to their own peculiar nature*; for as long as their dregs remain in the blood, and poison that source from which all the parts of the body are nourished and supplied, so long must the nervous system continue weak and infirm.

We next proceed to the cause and cure of *Hysteric Affections, Low Spirits, and Melancholy*.

The *Hysteric Passion* has been supposed to arise from some particular morbid cause impressed

pressed upon the *womb*; which by nervous sympathy, is quickly transferred from one part of the body to another; and wherever it fixes, resembles the diseases peculiar to such parts; creating *colic* in the bowels, *asthma* in the lungs, *giddiness* in the head, *suffocation* in the throat, with many other symptoms of the like nature.

But although this was the general opinion of the ancients, and which many of the moderns have taken upon trust; no opinion can be more exceptionable and improperly grounded; for I have repeatedly had occasion to observe, that various impressions on the body and mind will occasion *hysterics*, independent of any affection of the womb itself; and that it only suffers in common with other parts endowed with the same degree of sensibility.

The stomach is more amply supplied with nerves than the womb, and therefore, is more susceptible; hence, in very irritable and delicate habits, it often becomes the
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seat of hysteric affections, from errors in diet, where the aliment offends in quantity or quality.

The violent passions of the mind, as anger or extreme jealousy, to which women are unfortunately so subject, will often produce the same effect. Here it may be remarked, that the impression is made on the nervous system in general, and not on those of the womb in particular.

However, as *Hysterics* have frequently been observed to follow the obstructed menses, and as virgins on their first approach, or those who menstruate with pain and difficulty, are also often affected in the same manner, it may still be allowed, that hysteric disorders, sometimes entirely proceed from a local affection of the womb.

Hysterical and hypochondriac affections are of the same nature, for both proceed from a weakness and too much sensibility of the nervous system: The symptoms are only diversified by the difference of sex;
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in women, therefore, this malady is called the *hysteric passion*; in men, *hypochondriac melancholy*.

The excess of sensibility in the nerves of hysteric women, is incontestibly proved by the effect of *musk*, or other powerful odors, suddenly producing a fit, independent of any other cause, and going into a *bath too hot* has also been attended with the same consequence.

Although women of full habits who are barren or irregular, are most subject to hysteric complaints; there is scarcely any state of the female constitution which entirely exempts them from it.

No Disease appears more various and changeable than this; but although it often is very alarming, it seldom proves mortal: The manner of its attack and disappearance is sometimes so sudden, that the patient apparently at the point of death one day, seems almost in perfect health the next. However, when neglected it is apt to degenerate

nerate into obstinate *Chronic Diseases*, as faintings, low spirits, and melancholy.

Those of *hysteric habits* have always weak nerves, an obstructed perspiration, bad digestion, and are much oppressed with wind in the stomach and bowels. The symptoms are very different in different subjects: In general a strangulation in the throat is perceived to rise up like a ball, and therefore called *Globus Hystericus*, erroneously supposed to proceed from the ascent of the womb: A difficulty of breathing, pale urine, faintings, and profound sleep may also be looked upon as the true and genuine symptoms of the disease.

Sometimes the head or temples are affected with acute pain, as if a nail was driven into the part, attended with dimness of sight, and involuntary effusion of tears. At other times the patient is seized with convulsions, or sudden laughter without apparent cause, and talks inconsistently like one delirious.

The *Hysteric Fit* generally commences with universal languor and pain in the loins, at-

tended with a sense of coldness and nervous trembling; the heart begins to palpitate, the pulse becomes unequal and obscure; The extremities grow cold, a choaking is perceived in the throat; the face is pale, breathing difficult, and the voice is lost.

Instances have been known, though rare, where the patient remained for a day or two, as if in a *trance* or dead *sleep*, without apparent sense or motion, and from those signs of absent life, was accordingly prepared for burial.

As the fit goes off, the pulse gradually becomes stronger, and the countenance resumes its native color: A vast quantity of wind is discharged from the stomach, and at last, with deep sighings, and a face bedewed with sweat, as if awaking out of profound sleep, she is restored to speech, sense and motion, but complains of soreness over her body and limbs, as if she had been bruised.

During the violence of the fit, the attendants, instead of crowding in upon the patient,

patient, ought to be kept at a distance, that the fresh air may have immediate access to her lungs, otherwise they cannot be blown up; and the heart being overpowered will now want sufficient force to drive the blood through its vessels, consequently a *syncope* or mortal fainting might ensue.

The common custom of pulling open the contracted fingers with violence may overstrain or tear asunder their tendons; and that of half suffocating her with the smoak of burnt feathers or tape is equally absurd. All that can be done with propriety, at this time, is to lay her gently on a bed or couch, to keep her head moderately raised, and to guard her from such injuries as might happen by the violence of struggling.

Before we proceed farther, it is necessary to observe, that the *Hysteric Passion*, however distinguished by a different name, is, in many respects, a *true Nervous Affection* of the more severe and acute kind, and that it

is to be relieved or cured by the *regimen* and *medical treatment*, proper in such disorders.

The like delicacy of constitution, and the same general causes, equally dispose women to *Hysterics* and to nervous disorders; which perhaps may be the reason why that ornament of *Physic* and *Philosophy*, the celebrated *Boerhaave*, has not thought fit to treat of the *Hysterical Passion* as a separate disorder.

The variety of symptoms, and quickness of their transition from one part of the body to another, can only be accounted for on the extraordinary principle of nervous sympathy already mentioned.

What occasions hysterical complaints in one, may produce *asthma*, *convulsions*, *rheumatism*, or *diseases of the skin* in another, according as the offending cause is disposed to fall upon particular organs of the body.

In plethoric habits, where the fibres are strong, the pulse hard and full, and the symptoms violent, bleeding is proper; but on the contrary,

contrary, if the patient is weak, languid, and inclined to faintings, it would be improper and highly dangerous.

If the head is affected with pain, the feet may be put into warm water, and the temples bathed with vinegar, which may also be snuffed up the nose. The violent palpitations of the heart and internal flutter, may be relieved by clysters of vinegar and water, or a spoonful of lemon juice taken twice a-day, especially in full habits of body, attended with thirst and fever, where I have known it afford the most sensible and speedy relief.

Moderate exercise of all kinds, especially riding on horseback, or swinging, if the patient is weak, are found to be sovereign remedies, which may be greatly assisted by the use of *peruvian bark*, the *calybeate waters*, and *cold bath*; the two last of which will be most proper in Summer and Autumn; but above all, a conjugal life will be found the most salutary.

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In short, all nice and finical distinctions apart; frequent experience and attentive observation have convinced me, that whoever purposes to relieve or effectually cure *Nervous or Hysteric Disorders*, must do it by general means, which uniformly and permanently act on the general habit of body; and not by directing a new medicine for every new symptom, which at best, can only produce a momentary relief, but will never effect such a change of constitution as to end in a lasting cure.

Melancholy is a species of insanity, or delirium without fever, creating in the mind ideas which either arise from a false perception of external objects, or some internal impulse on the brain independent of all outward impressions whatever.

This disease unfortunately renders the patient unfit for the social enjoyments of life: It is either *original* or *acquired*; and if of long continuance, often degenerates into real madness.

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To avoid useless distinctions; under the general name of *Melancholy* may be comprehended those maladies termed *Vapors*, *Low Spirits*, and even *Lunacy* itself, being all so many branches from the same root, and only differing in degrees of violence.

Original or hereditary Melancholy is inherent in the constitution and intimately combined with the very principles of life. This particular species of the disease may be distinguished, by suddenly shewing itself, and disappearing without any apparent occasional cause; and as it results from a fault in the structure of the brain or nerves, is absolutely incurable, though it does not seem to shorten the duration of life.

The seeds of this disease, like those of the *Gout* or *King's Evil* are diffused through the blood, and enter into the very composition of the animal frame; for although, on examination after death, there should be no perceivable fault in those organs; yet as every effect

fect implies a preceding cause, it may rationally be concluded, that the first stamp of their existence was diseased, and will therefore, one time or other produce corresponding morbid feelings in the mind.

By simply viewing the stamina of vegetables, we know not what kind of fruit or flower they will produce; so in like manner the *efficient cause* of diseases often lie concealed and inactive till excited into motion by accidental means.

However extraordinary it may appear, it is probable that the seeds of diseases in animal bodies, are as distinct as those of vegetables; for each produces a species peculiar to itself.

The matter of the *small pox* applied by Inoculation, will not produce the *measles*, but an eruption of the suppurative kind; and the poison of a mad dog, invariably affects the throat, brings on a difficulty of swallowing, and the *dread of water*: But how different diseases thus uniformly fall on particular parts

parts of the body, and occasion the same symptoms, is beyond the extent of medical knowledge or human comprehension to determine.

Acquired or adventitious melancholy does not, like the former species, arise from a diseased state of the brain or nerves, but from some violence applied in a greater degree than their tender texture can bear, without impairing their function, and destroying that natural correspondence which ought to exist between external objects and the ideas arising from them.

Among the principal of such causes, is *a translation of diseased humors to those organs*, the effect of poisons, spirituous liquors, or the influence of the moon: Also the violent excess of anger, joy, and sorrow, or the insidious power of love or jealousy.

Religious doubts which perplex the mind with alternate hopes and fears, a sedentary life, or warm, damp air, all dispose the con-

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stitution to *Melancholy*, by weakening the nervous power.

Those are the *general causes* of low spirits, and acquired melancholy, which always operate most powerfully on people of nice sensations, whose *pleasures and pains* from over-delicacy of the nervous system, are too exquisite for sense; but the precise manner in which they produce their effects, or why such causes do not always occasion similar consequences, in such a particular state of the nerves, is utterly unknown.

“ Where joy most revels, grief doth most lament,
 “ Grief joys, joy grieves, on slender accident.”

Those, on the contrary, of more clumsy organs, who are possessed of little more than vegetable feeling, never experience the misery of nervous disorders; but if they have less pleasure, the account is ballanced by their enduring less pain.

Hence it appears, that from vapors or pleasing melancholy, to the extremes of *lunacy* and *raging madness*, their immediate causes

causes can only be two, viz. the first, internal, from a *fault of the Brain or Nerves*; the second external, from *adventitious causes* so violently applied, as to disturb or prevent their natural functions.

We have already observed, that the body and mind receive all their information by means of the *Brain and Nerves*, and that by those they mutually converse and sympathise with each other; hence it will follow, that whenever those organs are injured, and like unfaithful messengers do not truly execute their office, and represent things as they are; the patient will then be imposed upon by *delusive perception*, and figure to herself things which have no existence but in her own distempered brain.

Objects thus felt through a *false medium* will be as imperfectly perceived by the mind, as those reflected from a false mirror glass, which assume a magnitude and shape not existing in such bodies, but are occasioned by their being falsely represented to the eye.

That *Melancholy* and madness arise from a *perversion of nervous feeling*, becomes still more evident, by observing that where the nerves, distributed to the different senses, are injured, their faculties are immediately altered and impaired: Thus the jaundiced eye sees all things *yellow*, and the palate being vitiated, there is no longer any truth in the taste.

Those who are subject to this lamentable malady, perceive a sinking at the stomach, are timorous and fond of solitude; they are suspicious and inquisitive, alarmed at mere trifles, and entertain the most inconsistent and extravagant notions; ever apprehensive that some dreadful calamity is near.

Trallianus speaks of a woman who fancied she sustained the globe of the world on the tip of her finger, which she therefore continually kept upright for fear it should fall. I once attended a lady, now in perfect health, who from the mere force of imagination and delusive perception, persuaded herself that she

saw

saw the spire of a neighbouring steeple bend down to its basis, and elevate itself again.

Such as are thus affected with depraved feeling, may be said to labour under an *incubus* of the brain; for at one time they think themselves dead, at another flying through the air; now taller than a *Colossus*, and then suddenly dwindled into the stature of a pigmy: Some converse with angels and demi-gods, and others talk with demons and hydra-headed monsters.

They suppose that every one looks upon them with a malignant eye, and puts the worst construction on what they say and do; in short, though they are industrious to torment themselves, by means which appear ludicrous, they experience substantial misery, and are sometimes driven to desperation and *suicide*; so that in the whole catalogue of earthly evils, human nature cannot present an object more truly pitiable!

What then shall be said of those, who either from ambition or the view of gain, stifle

stifle the feelings of honor and humanity, and sordidly submit to form alliances which *entail hereditary miseries on their posterity*, more grievous than death itself? and who, therefore, instead of remembering the authors of their being, with filial affection, must behold them with indignation and sorrow!

Retirement and bodily ease are not destructive to the melancholy; for whilst they sit still unemployed, they become a prey to their own thoughts. On the contrary, *exercise and severity of diet* are beneficial; for no one can think or study with the same attention, when impressed with the disagreeable sensation of hunger, or tormented with a raging tooth, as when he is perfectly at ease.

Violent agitation of body will always interrupt the attention of mind: To deny this would be as absurd as to assert that a person could deeply meditate on things *agreeable* or *disagreeable*, with the same deliberation, when carried swiftly through the air by a headstrong horse, at the peril of his life, as when
retired

retired in safety, and reclined at ease on a bed of down.

Should therefore the Poet attempt to draw a striking image of Melancholy, he would, like the judicious *Beaumont* and *Fletcher*, represent her amidst Bats and Owls, in the depth of solitude and gloom.

- “ Hence all you vain delights,
- “ As short as are the nights,
- “ Wherein you spend your folly ;
- “ There’s nought in this life sweet,
- “ If men were wise to see’t,
- “ But only melancholy :
- “ Oh, sweetest melancholy !
- “ Welcome folded arms, and fixed eyes,
- “ A sigh that piercing mortifies,
- “ A look that’s fastened to the ground,
- “ A tongue tied up without a sound.
- “ Fountain heads and pathless groves,
- “ Places which pale passion loves ;
- “ Moonlight walks, when all the fowls
- “ Are warmly hous’d, save bats and owls ;
- “ A midnight bell, a parting groan,
- “ These are the sounds we feed upon !”

Milton,

Milton, whose sublime genius never stooped to borrow an idea, but to improve and refine it, seems to have had this beautiful passage in view at the opening of his *Il Penseroso*.

- “ Hence vain deluding joys,
- “ The brood of folly, without father bred,
- “ How little you bested,
- “ Or fill the fixed mind with all your toys;—
- “ But hail thou Goddess, sage and holy,
- “ Hail divinest melancholy,
- “ Whose faintly visage is too bright
- “ To hit the sense of human sight.
- “ Come penfive *Nun*, devote and pure,
- “ Sober, stedfast, and demure;
- “ All in a robe of darkeſt grain,
- “ Flowing with majestic train,
- “ And sable stole of *Cyprus* lawn
- “ O’er thy decent ſhoulders drawn.
- “ Come, but keep thy wonted ſtate,
- “ With even ſtep and muſing gait,
- “ And looks commencing with the ſkies,
- “ Thy rapt ſoul fitting in thy eyes,
- “ There held in holy paſſion ſtill,
- “ Forget thyſelf to marble, till
- “ With a ſad, leaden downward caſt
- “ Thou fix them on the earth as faſt.

That

That great master of Allegorical Fiction, *Spencer*, advancing still farther in the sequestered regions of melancholy, at last leads us to the dreary mansion of *Despair*, in the following lines, which standing unrival'd as awfully descriptive, induces me to present them to the Reader.

“ Ere long they come, where that same wicked wight
 “ His dwelling has, low in an hollow cave,
 “ Far underneath a craggy cliff yight,
 “ Dark, doleful, dreary, like a greedy grave,
 “ That still for carrion carcases doth crave :
 “ On top whereof ay dwelt the gasty owl,
 “ Shrieking his baleful note, which ever drave
 “ Far from that haunt all other chearful fowl ;
 “ And all about it wand’ring ghosts did wail and howl !
 “ That darksome cave they enter, where they find
 “ That cursed man*, low sitting on the ground,
 “ Musing full sadly in his fullen mind ;
 “ His griefy locks, long growen, and unbound,
 “ Disorder’d hung about his shoulders round,
 “ And hid his face , through which his hollow eyes
 “ Look’d deadly dull, and stared as astound ;
 “ His raw bone cheeks, through penury and pine,
 “ Were shrunk into his jaws, as he did never dine.

L 1 .

“ His

* *Despair*.

“ His garment nought but many ragged clouts,
 “ With thorns together pinn’d and patched was,
 “ The which his naked sides he wrapt abouts ;
 “ And him beside there lay upon the grafs,
 “ A dreary corse, whose life away did pass,
 “ All wallow’d in his own yet luke-warm blood,
 “ That from his wound yet welled fresh alas
 “ In which a rusty knife fast fixed stood,
 “ And made an open passage to the gushing flood !”

Happily, *acquired Melancholy* from the irregularity of the passions, may generally be *cured*; the intention of which will best be answered, by removing as much as possible the cause which distresses the mind ; but if it arises from a *translation of morbid humors to the brain*, being then *symptomatic*, it can only be cured by removing the original disease.

Since we find that painful sensations applied to the body or mind, often destroy health and occasion Melancholy ; by parity of reasoning it may be concluded, that pleasurable feelings of a contrary nature will
bid

bid fairest to restore it : The chiefest of those are, *cheerful Company*, *Poetry*, *Music* and *Dramatic Entertainments* of the comic kind. Frequent *Exercise* in the open fields, or flower gardens ; the waters of *Tunbridge* or *Spa*, assisted by that sovereign remedy the *Peruvian Bark*, and the use of the *Cold Bath*, will also be found powerfully salutary.

The study of *Natural History*, and employment of delineating some of its most beautiful and minute objects arranged under their proper classes, as those of *Birds*, *Insects* and *Flowers*, will afford very pleasing and rational entertainment, and assist in diverting the mind from things of a more ferocious nature.

The Cure of melancholy may best be attempted in the *Spring* and *Summer*, by travelling far from home, with agreeable company, or if convenient into a foreign country : By thus shifting the scene, the mind will be presented with a continual change of new objects which will strike

more forcibly on the senses, than things familiar to them. The Eye will be delighted with all the charms of Variety, in new prospects; the impulse of Sounds, different from those before, will strike the Ear; unusual Odors will affect the Smell, and the Taste itself will also experience a Change by the variety of aliments peculiar to each climate.

From those new impressions thus made on the senses, which are so many avenues or *immediate inlets to the brain and nerves*, new ideas will arise, so as insensibly to engage the attention, especially, where from remoteness of situation, a thousand accidental circumstances will be avoided which otherwise might have obtruded, and awaken'd in the mind the cause of its distress.

We have already prov'd that particular thoughts and reflections of the mind are join'd with certain conditions of the body; and therefore, that our manner of living, in a considerable degree, changes our manner of thinking.

Hence

Hence, by *Travelling*, the universal benefits of *Air*, *Exercise* and *Diet* will at once be most agreeably obtain'd; all which tend to strengthen the constitution, and to wear out disagreeable impressions made on the body or mind, by introducing others of a different nature.

The next sovereign remedy in diseases of the mind is *Music*. *Cicero* asserts its amazing power, and *Plato* supposes the effect of harmony on the mind is equal to that of air on the body: Its divine influence is exemplified by *David* in the cure of *Saul*; and the eastern Monarch who had conquer'd the world, was himself subdued by the seraphic strains of *Timotheus's Harp*, which so captivated his ear, that he was rous'd into madness, or soothed into melancholy as the sounds became sprightly and animated, or solemn and slow.

So wonderful is the empire of Music over the mind, as recorded by the ancients, that it leads the soldier undaunted to the "im-
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“minent deadly breach” and alternately stops the rage of conquest, by its varied power: It mitigates bodily pain, suspends the malignant force of madness and despair, and lulls the soul into tranquillity and peace.

“Music the fiercest grief can charm,
 “And fate’s severest rage disarm:
 “Music can soften pain to ease,
 “And make despair and madness please:
 “Our joys below it can improve,
 “And antedate the bliss above.”

POPE.

Such are the surpassing poetical beauties of the following lines from *Milton’s Comus*, relative to our subject, that I cannot omit their quotation without the extreme self-denial.

“At last, a soft and solemn breathing sound,
 “Rose like a steam of rich distill’d perfumes,
 “And stole upon the air, that even silence
 “Was took ere she was ware, and wish’d she might
 “Deny her nature, and be never more
 “Still to be so displac’d. I was all ear,
 “And took in strains that might create a soul
 “Under the ribs of Death.”

But

But least we should appear to have catch'd, by sympathy, the spirit of enthusiasm from those Divine Bards; it will be necessary to remark, that the salutary power of Music and its manner of operating on the body and mind, depends as much upon rational, and demonstrative principles, as that of any medicine in the *Materia Medica*, although but little has been said on this subject, except in a vague and chimerical way.

Tickling the sides or soles of the feet, that intolerable sensation between pleasure and pain, has been known to occasion convulsions or even death, in those of great sensibility; and fragrant *Odors* will exhilarate the spirits, or occasion faintings, according to their different qualities.

We need not then be surprized, that the power of Harmony which cures the poisonous bite of a *Tarantula* or eight-ey'd spider of *Apulia*, should produce effects equally as extraordinary, by touching the nerves with

ex-

exquisite delicacy, and giving to the mind such sweet excess of rapture and delight.

Music produces its salutary effect by creating an agreeable sensation on the nerves of the Ear, which communicate with the Brain and general Nervous System; and as the inordinate passions of the mind all make their first, disagreeable Impression on those parts, and occasion *Low Spirits, Vapors* and *Melancholy*; no remedy can be more rationally applied to counteract their malignant power than that of Music; which excites a *contrary sensation* of the pleasurable kind, and acts immediately upon the *same Organs*.

“ Cease your cares : the body’s pain

“ A sweet relief may find :

“ But gums and lenient balms are vain

“ To heal the wounded mind.

“ On every string soft breathing raptures dwell,

“ To soothe the throbbings of the troubl’d breast ;

“ Whose magic voice can bid the tides of passion swell,

“ Or lull the raging storm to rest.”

BROWN’S CURE OF SAUL.

The effect of music however will be different according to the style, and manner of
its

its composition, and therefore should be adapted to the particular state and disposition of the mind. The plaintive tone of soft Flutes will induce a pleasing languor, and compose it when tortured with rage or irritated by the more violent passions; and on the contrary, the merry Pipe and Tabor will exhilarate and raise the moping head of Melancholy, depressed by *religious Despair*, *disappointed Ambition*, or *hopeless Love*.

Let us appeal to the refined Feelings of those most susceptible of the divine power of *Harmony*, to prove its sovereign influence over the mind; that it is the true oblivious Antidote, the *Nepenthe* of the Gods, to heal a wounded spirit, to exalt the soul above low-thoughted care, and lap it in *Elysium*.

SECTION XI.

*Of a Consumption; its Nature, Treatment
and Method of Cure.*

BY a Consumption is meant a universal wasting of the Body, generally occasioned by the inward decay of its vital parts, particularly the *Lungs*.

The Lungs are two delicate spongy bodies, one of which is placed on each side the heart in the cavity of the breast: They are chiefly made up of *air-vessels* and *blood-vessels*, and intended by Nature to answer the double purpose of Respiration or breathing, and of mixing the fresh *Chyle* as it is taken into the blood; the whole mass of which is constantly passing through their substance in a full stream.

Before the act of breathing commences, as in the *Infant*, during its nine months residence in the womb; only about a third
part

part of its blood can circulate through the *compressed Lungs*; but as soon as it is born, and they are blown up with air, then the whole mass passes freely through their numerous blood-vessels: Hence it follows, that whatever interrupts Respiration and hinders the free play of the Lungs, will occasion an accumulation of blood in their tender substance, and dispose the patient to a consumption, by creating *Inflammation, Ulceration*, and a *Spitting of Blood*.

Although Breathing, under certain circumstances, as I have fully shewn in another place*, is not essential to life, because the Infant before birth dispenses with the want of it; yet being once begun, its continuance becomes absolutely necessary, for stopping the breath, a short time, then produces immediate suffocation. Thus the *Heart and Lungs* unite their power, and labour with unremitting and unwearied dili-

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gence

* *Lecture introductory to Midwifery, edition 3d. p. 20.*

gence to keep the human body alive ; even sometimes for the tedious period of a hundred years.

As the stomach converts aliment into *Chyle*, so the action of the Lungs changes it into blood : This is the more effectually brought about, by the air-vessels and blood-vessels being closely interwoven with each other ; from which, the blood will be compressed and agitated between two contrary forces, viz. that of the *Heart* driving it through its vessels, and of the *Air* which rushes into the Lungs every time we draw breath.

From this previous knowledge, it will be more evident, that those who have weak Lungs which cannot freely transmit both blood and air, must become emaciated and consumptive ; for then the *Chyle* cannot be sufficiently enriched to nourish the body ; and their tender vessels will continually be on the stretch by the force of the circulating blood and inspired air.

Hence

Hence also will appear the innumerable inconveniences of those who have weak Lungs, during the vicissitudes of the weather, the various degrees of heat and cold, or the moisture and dryness of the air to which they are immediately and continually exposed. The air when excessive cold will not only repel blood from the surface of the body to the Lungs, but also stop their perspirable vapor, and by rushing into their cavity with a force superior to their resistance, may tear them asunder and create *Ulceration* and *Spitting of Blood*.

Intemperance in eating and drinking, or the excess of anger are also extremely dangerous to the *consumptive*, by increasing the blood's motion, which will lay an additional stress on its weak vessels, especially in the last instance, where the voice is often exerted with uncommon power, and consequently where the air-vessels will be violently distended and overstrained. The regulation

gulation of the passions, as well as temperance, and a pure air, are all of the greatest moment to such as are inclined to an *inward decay*.

Our climate in Britain, from its situation as an *Island*, is extremely unfavorable to consumptive habits: The quick transitions from heat to cold, and the sudden changes in the temperature of the air, as to its moisture and dryness, are not to be endured by delicate constitutions without very sensible injury.

Such is the great and manifest influence of the weather on the human bodies, that we constantly find all the consumptive symptoms aggravated by the Winter season, in spite of the most powerful medicines; and on the contrary, as Summer approaches, they are as evidently relieved without any medicines at all.

A cold, moist air which generally prevails in this country in *Autumn* and *Winter*, is extremely pernicious to such as
have

have tender lungs : In those inclement seasons the blood will be repelled from the surface of the body to the weak internal parts ; the pores of the skin are obstructed, and that perspirable fluid which ought to pass off, being turned upon the throat and lungs, will there produce a defluxion of sharp rheum, attended with *Hoarseness*, a tickling *Cough*, and *Oppression at the breast*.

Under such symptoms the patient is said to have got cold, which being too generally neglected as a disorder of little consequence, often, in the Winter season, lays the foundation of a *Consumption*.

Damp air, when intensely cold and taken into the lungs, puts an immediate stop to that subtile vapor, which in health is constantly passing off from their tender internal surface ; and which becomes visible by breathing on the polished surface of hard bodies, or in the moisture observed on the inside of coach-glasses when closely shut up.

Of

Of all the different ways of taking cold, this is the most dangerous to those who have weak lungs, and inclined to a consumption; for then the injury is immediately sustained by the affected part. From this cause, though apparently trifling, I have often observed very serious consequences. The most effectual caution to prevent it, is that of breathing through a muff, or lawn handkerchief, by which, the air in passing as it were through a strainer, will be divested of its chilling power, as well as any noxious particles with which it might be combined.

In England, *Perspiration*, on a medium, nearly equals all the other Evacuations of the body; and such is the inequality of our climate, respecting the degrees of heat and cold, that in Summer the quantity of perspiration is double to what it is in Winter; therefore, without the secretions of urine and stool are considerably increased in the last season, to compensate for the loss of perspiration;

piration; the body must then necessarily labour under a Plethora or preternatural fulness, the quantity of our meat and drink, in those two opposite seasons, being nearly the same.

Hence the retained gross humours will be apt to fall on the weakest internal part, and therefore the Lungs, from their spongy texture and peculiar delicacy, will more immediately sustain the injury.

Whoever will attend to the state of the human body, and obvious effects of our Atmosphere upon it, at different seasons of the year, may soon be convinced, that of ten women disposed to a Consumption, either from *original* or *accidental Causes*, at least nine of them fall into this disease in the *Winter*, and gradually become worse at each return of that season, till by repeated attacks, the natural organs or movements of the body are worn out, and the *Lungs* in particular at last tend to a state of

dissolution and decay, followed by *Ulceration* and *Spitting of Blood*, or a *Collection of Matter*, which put a period to the patient's life.

The Sleepiness and oppressive Symptoms observed in those half-starved with excessive cold, is another substantial proof, that the circulation may be considerably changed by inclemency of the Air; for such consequences seem chiefly to proceed from the repulsion of blood to the internal parts, especially the *Brain*; by which its Vessels are overloaded, and the Patient from thence is seized with a *temporary Lethargy*, or uncommon propensity to Sleep.

But as no conviction is so cogent and satisfactory as that arising from our own feelings; it may be necessary to refer the Reader to what was advanced at page 182, to shew a communication between the external and internal parts; and as it has there been proved, that *intense Cold* applied to the body

or

or Soles of the feet, often occasions pain in the bowels and a *Diarrhœa* or Purging; it will appear less extraordinary that the same external cause, whether it acts on the nerves, or pores, should produce bad effects on the *Lungs*, particularly, since they themselves, as well as the surface of the body, are exposed to the pressure, and severity of the cold Atmosphere.

If the Winter is manifestly so injurious to constitutions of the consumptive kind; the approach of Summer as certainly relieves them: Warm, temperate weather relaxes the skin, encreases perspiration, and by promoting a free and equal distribution of blood to all parts of the body, takes off the stress from the weak internal parts; and thus by removing the accumulated gross humours, and restoring the balance between the circulating power of the blood and resistance of its vessels, the patient finds herself so much recovered, that she vainly persuades herself all danger is over and past.

The Relief owing to this change of circulation in *Summer*, may still be farther illustrated and confirmed by what happens in the *State of Pregnancy*, during which consumptive women find the symptoms so much mitigated, that scarcely one in a thousand dies when with child; but being delivered, they are revisited with their usual complaints, and many of them do not long survive, especially those who neglect *Suckling*; which instead of rendering them weaker, or aggravating the disease, according to the general opinion, is the only expedient, next to that of a warmer climate, which can be proposed for the continuance of their relief, as I have repeatedly had occasion to observe.

Those things being highly interesting to the safety of Women, I shall endeavour to render them as clear and intelligible as the nature of the subject will allow.

From the œconomy of the pregnant Womb, and the means devised by Nature

to carry on the circulation between the mother and child; the following circumstances will, in a great measure, account for that particular, salutary change in consumptive women during the time of their *being with Child*, or *giving Suck*.

First, as consumptive women are often irregular or obstructed; that superfluous blood which ought to pass off by the womb, will be accumulated in the body, and fall on the *weak Lungs*. Secondly, when such women prove with child, they will find themselves as effectually relieved as if the menses were restored to a regular state; because the redundant blood will then be consumed by the child. Lastly, those who *suckle* are relieved nearly in the same manner; for Milk being chiefly supplied by that chyle which otherwise would be converted into blood, its vessels will be diminished in fulness, and the *weak Lungs* relieved as before.

Consumptive, pregnant Women, who go their full time, will therefore happily be freed

freed from such inconveniences as might have befallen them from an obstruction, when not pregnant; and *Nurses* who suckle for the same length of time, will be equally secure, since both in the one and other the menses are naturally wanting.

Nature without going out of her wonted road, from a happy concurrence of causes, here acts as effectually for the safety of the mother and child, as if it was her main intention so to do. I have also observed that consumptive women who *neglect Suckling*, and do not menstruate in due time after their lying-in, are often affected with a *Spitting of Blood*, and die soon after.

But notwithstanding all that has been said, as things good in their own nature, often defeat their intended purpose by being misapplied; should the patient begin to menstruate during the time of her giving Suck, or find herself daily losing strength, she ought then to wean her child without delay; and to take light nourishment, often, and in small quantities.

Since

Since we find the *consumptive* are constantly relieved by the *Summer*; those who are sufficiently attentive to their own safety, will, if possible, remove into a warmer climate, where that season is in a manner perpetual; or at least, where the Winter is so short and mild, as to be endured with less injury to the constitution.

By such a proceeding, joined with the advantage of a Sea Voyage to the South of *France, Portugal, or Italy*; by a regulation of the passions, frequent *Exercise on Horse-back*, and a *Milk Diet*, many might with certainty be rescued from the grave; especially where the disease is not too far advanced, or the substance of the Lungs corrupted and broke down; in a word, where the patient can hope to obtain a cure by any human means, those are most likely to effect it.

If unfortunately she is prevented from changing her climate; the best means of counteracting the severity of her own may be expected from all such causes as gently
pro-

promote a free and equal distribution of blood to different parts of the body, especially its surface; the most effectual of which are *moderate Exercise*, wearing *fine Flannels next the Skin*, the frequent use of the *Flesh Brush*, the application of *Blisters*, the administration of *Antimonials*, and lastly, the *Peruvian Bark* with *Nitre*.

When she is so weak, and the weather so cold as to deprive her of Exercise abroad, *Swinging* has sometimes been found of considerable service; a remedy well adapted to the circumstances of those who cannot afford to ride on Horse-back, or in a Carriage. The regularity of the menses should, if possible, be preserved, and the secretions of urine and stool promoted, especially when the pores of the skin are stopped; for when one discharge is lessened; if another is not proportionably increased, a preternatural fulness of the body must follow which will always endanger weak Lungs.

An Aromatic Plaster large enough to cover the stomach and bowels will cherish and invigorate the internal parts, and also afford relief during the extreme severity of the winter season.

From the whole of what has preceded, two general inferences may be drawn, viz. first, that a *Consumption* is rather to be relieved or cured by a *strict Attention to Regimen*, than the frequent administration of Medicines; secondly, that when a cure is attempted, they ought chiefly to be given towards the approach of Summer, when the *Influence of Weather*, joined with *Exercise on Horse-back*, and a *Milk Diet*, concur to increase their effects.

Hoffman, with many others, supposes, that one principal cause of *Consumptions* in *London*, as well as Britain in general, is owing to the immense quantity of *Fossil* or *Pit-Coal*, there consumed for fuel; from which the air is overloaded with *sulphureous*, *arsenical* or other *metallic Particles* highly offensive to the Lungs.

This is no improbable conjecture, when we consider the deadly effect produced by the *Fumes of burning Charcoal*, as well those from *Lead* or other Metals in a state of fusion. All metals heated to a certain degree, throw off a considerable quantity of effluvia, as is evident from the use of *metallic Stoves*, which often create Head-ache, sickness at Stomach, and difficulty of Breathing, especially in small rooms closely shut up from the access of external air.

The suffocating cough excited by a pan of coals used in warming beds, which is incessant till the noxious Fume is all expelled from the Lungs, shews, that such air is highly offensive even to those of a healthy person; how much more injurious then must it prove to that organ, in a tender, ulcerated state, when exposed to an atmosphere more or less impregnated with the same pernicious qualities?

From some kinds of *Pit-Coal*, may be extracted *Alum*: By distillation it yields a
very

very *acid Liquor* and a *thin Oil*, which in burning, fly off and impregnate the air with their peculiar qualities.

We know the effect of poisons externally applied to open, ulcerated vessels, is more deadly than when internally taken. *Pope Clement* was destroyed by a poisoned Torch carried before him. The Fumes of fermenting Liquors will suffocate; and the Vapor of *La Grotta de' Cani*, near *Naples*, produces the same mortal effect. Thus we see what innumerable Avenues are open to the approach of Death, since the very air we breathe may convey a mortal and slow consuming poison.

Hence, such as have tender Lungs should carefully avoid breathing a *putrid Air*, as that of Hospitals or the Chambers of those sick with the *Small-Pox* at the height of the eruption.

The Air near stagnating waters, dung-hills, common-sewers, or the muddy banks of large rivers, from which the water often

retires, is highly pernicious, especially in hot weather; for *Heat* and *Moisture* are two great causes of putrefaction; and vegetable bodies in a state of corruption, will soon bring others to decay, if they lie within their sphere of action. From such circumstances it will appear, that sleeping in a close bed-chamber, with such as have bad breath, or corrupted Lungs, must be highly dangerous to those inclined to a Consumption.

Indeed, I cannot help thinking that the *sulphureous* or *metallic fumes* proceeding from large *Coal Fires*, and continually taken into the Lungs of sedentary, ailing people, who are most tempted to sit too near them, may be extremely hurtful, by destroying the enlivening spirit of the air, crisping their internal membrane, and drying up their natural moisture; the consequence of which will be a *Hearseness*, *short, phthisicky cough*, with *Tubercles in the Lungs*, ending in a *Consumption* or *Asthma*.

The

The liberal use of *Animal Food* and *Malt Liquors* I know has been deem'd the cause of Consumptions ; but there seems no reason to adopt such an opinion ; because many of the *consumptive* have been known perfectly to recover by removing into warmer Climates, where they lived almost entirely in the English manner ; a circumstance which at least clearly shews the great influence of a *temperate, pure Air* ; and that the constitution, when assisted by its salutary power, is able to surmount every obstacle to a cure.

Besides, was a *Consumption* in this country occasioned by *Peculiarity of Diet* ; that being nearly the same all the year round, so ought the symptoms ; but on the contrary, in *Summer* the patient is always relieved, let the Diet be what it will ; and the utmost caution in eating or drinking is found insufficient to prevent the disease from returning with violence, on the approach of *Winter*.

In

In short, from a general review of the several circumstances relative to this subject; the *Instability* and *Coldness* of our Climate, joined to its *Moisture*, and the *noxious Fumes of Pit-Coal*, with which the air of close rooms is continually loaded in the *Winter*, seem the *two principal concurring Causes*, why a *Consumption* is *endemic* or peculiar to the *Island of Great Britain*; and why it particularly prevails with uncommon severity in that *cold, moist, and variable Season*, when the greater quantity of *sulphureous* or *metallic Vapor* conspires to increase the morbid cause.

So great is the devastation made by this fatal malady, that like a *chronic or slow consuming Plague*, it destroys the human race by thousands, and with the unrelenting force of a cruel spoiler, generally seizes the young and most beautiful of the Female Sex; for such from their natural delicacy of frame, are more particularly subject to its malignant power.

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By the London, yearly *Bills of Mortality* it appears, that the number of those carried off by a *Consumption*, makes nearly a *fifth* part of the whole dying by all the other diseases put together; which however incredible, I found to be a fact: for on examining the several *Bills of Mortality the last six Years*, I found the proportions stood thus.

Sum total of Deaths from December 1770 to December 1771, 21780; of whom died of Consumptions 4809, being more than a fifth of the whole.

From the year 1771 to 1772 total of deaths 26053; of whom died of Consumptions 5179, being about a fifth of the whole.

From 1772 to 1773 total of Deaths 21656, of whom died of Consumptions 2825. From 1773 to 1774 total of deaths 20884, Consumption 4242. From 1774 to 1775 total of deaths 20514, Consumption 4452. From 1775 to 1776 total of deaths 19048, Consumption 4508, being nearly a fifth of the whole.

Sydenham

Sydenham supposes that *chronic Diseases* destroy a third part of those who die, and that two, out of three of them are carried off by a *Consumption of the Lungs*; and seeing that between four and five thousand people are yearly cut off by that disease in the cities of *London* and *Westminster*; it will follow, by a moderate computation, that upwards of 30,000 people die yearly in Britain of this destructive malady; of whom, by far the greatest part, are women, in consequence of *Irregularities* peculiar to their sex.

It is something remarkable, that in *Holland*, as well as different quarters of this kingdom, where the inhabitants use *Turf Fires*, scarcely any of them die consumptive: The fact is certain, but whether owing to any particular quality of this vegetable fuel, or proceeding from a more healthy state of the air in such situations, and the temperate way of life peculiar to the inhabitants, I cannot take upon me to determine.

In *Holland*, the air, although moist, is perfectly free from mineral steams, and therefore more soft and friendly to the Lungs of consumptive people than some parts of England; especially to those affected with a dry, short cough, which strongly indicates their being affected with *Tubercles*.

The air of cities being replete with smok, and sulphureous vapors, with the effluvia continually proceeding from animal bodies, must certainly be more offensive to the Lungs than that of the country.

Perhaps the tendency from this cause, to form those small livid knobs or *Tubercles*, so often found in the Lungs of consumptive people, may be much increased by the dryness of the air in great cities, where the rains, instead of sinking into the earth, as in country places, are immediately carried off by the common-sewers; and for this reason, people of spongy solids and dropfical habits, find themselves better in town than country.

Having considered the general causes and method of curing a Consumption proceeding from the nature of our climate; we shall next point out that particular habit of body, whether *original* or *acquired*, which renders women more immediately subject to it, and afterwards lay down the most effectual means for its *Prevention, Relief, or Cure*.

Human bodies, like particular Edifices, are formed to endure a longer or shorter time according to their manner of construction and the materials of which they are made up: In some, the organs are naturally firm and strong; whilst in others, they are composed of *perishable stamina* derived from the parent, and therefore liable to wear out, before the usual period of life is completed.

Agreeable to this observation, I have often remarked from the *public papers*, as well as those more solemn monitors the *Tomb-Stones*, that many of the same name
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and family were carried off nearly in the same term of years; and I have no doubt, but the correspondence would still have been more exact, was not the duration of life lengthened or shortened, from Temperance, Excess, or other accidental circumstances inseparable from each individual.

We also find that such people as very soon complete animal growth, and arrive at their utmost stature before the due period, are generally *short-lived*; according to an old proverb indelicately expressed, but no less true. The same observation holds good in *Vegetables*, for those of the same species, soonest produced, are the first which come to decay: Such a variation from the standard of nature, in animal or vegetable bodies, implies a weak, spongy texture of their constituent parts, which must therefore render them less durable.

The sudden growth of young people after a severe fit of illness also illustrates this matter; for their solids being then greatly

weaken'd, will yield more than usually to the circulating force of the blood, now considerably increased by the keen appetite and strong digestion usually attending.

Thus may be seen, why those born of *consumptive Parents*, or who derive from them the *King's Evil*, *Venereal Disease*, or *Scurvy*, cannot be healthy or long-lived, till the seeds of those maladies are destroyed and taken away; and hence the distinction of a *scrophulous*, *venereal*, or *scorbutic* Consumption, originally existing in the body.

Those of a very delicate habit and fair complexion, who are subject to hoarseness and a cough on slight occasions, are narrow chested, and have a long, slender neck; are of all others most subject to a Consumption.

This Disease may also proceed from a waste of blood and juices, by a *Profusion of the Menses*, or *Fluor Albus*, *Night Sweats*, or *Habitual Looseness*. An obstruction of the menses, the sudden suppression of a famous
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nious fluor albus, discharge from old sores, eruptions repelled from the skin, as well as the immoderate use of spirituous liquors, or the unfavorable termination of the *Small Pox*, *Measles*, or *Hooping Cough*, have all been known to produce that kind of Consumption which falls upon the Lungs.

There is also a *Nervous Consumption*, supposed to arise from extreme delicacy of bodily frame, or an obstruction of the glands; but much more frequently, it is brought on by *Grief*, or distress of mind, which destroy the animating power of the nerves; consequently, both *Digestion and Circulation depending upon it*, being impaired, the body must daily waste for want of nourishment, although there is no particular local decay of the Lungs or other parts.

That hereditary species of Consumption proceeding from a *scrophulous, venereal or scorbutic Taint*, can only be relieved or cur'd by such medicines as are peculiarly adapted to the nature of those diseases; which purify

fy, and give balsam to the sharp, thin blood, and evacuate those offending humours, which might otherwise fix upon the Lungs and create inflammation and destruction of their substance.

Women are most apt to fall into a Consumption in *Winter* and beginning of *Spring*; particularly, from the time of maturity to the age of thirty-five; *this is the fatal period* which so much indangers the female constitution; especially if the menses do not commence duly, or afterwards become obstructed and irregular: Under those circumstances, if they are uncommonly delicate in bodily structure, were subject to a *Bleeding at the Nose* when younger, or born of unhealthy parents; 'tis then ten to one but they fall into a Consumption, of which a *spitting of blood* is generally the certain forerunner.

This malady, tho' mild in the beginning, if neglected, grows worse every Winter, and runs thro' all its stages, till at last the Lungs
are

are *ulcerated* and *broke down*, or beset with *Tubercles* which suppurate and destroy the patient.

Among the vast number of consumptive cases which happen in this immense *Metro-polis*; those most conversant with the disease must have seen this remark verified a hundred times over.

An ulceration, or abscess of the Lungs are extremely difficult of cure; because, a part agitated by the cough, and continually put upon the stretch by the influx of *Blood* and *Air*, cannot easily be disposed to heal; particularly as the cold air in contact with it, is found extremely unfriendly to ulcers in general. We may add, that since the putrid matter cannot always be raised by coughing, it will necessarily corrupt the contiguous parts, or being sucked up into the mass of blood, will increase the fever, and aggravate the disease.

Altho' I have seen some instances where such have recovered, they rather shew what may possibly happen, than what may naturally

turally be expected. The inference I would wish to have made from these particulars is simply this; That as a *confirmed Consumption* is seldom successfully treated; every prudent caution ought to be taken, and all possible means devised, in time, to prevent it from arriving at an incurable state.

But here lies the obstacle so unfortunate for the patient: This disease, like a treacherous adversary, makes its advances by such slow and insensible degrees, with so little pain or apparent danger, that she seldom thinks it necessary to apply for advice, till every remedy would be try'd in vain.

This formidable Disease, as already remarked, generally comes on about the end of *Winter* or beginning of *Spring*, with what is called a bad cold, followed with want of appetite, indigestion and sickness at stomach. A slow, *hectic Fever*, particularly in the evening, or after eating, with flushings in the face, also prevail: Sometimes there is a de-
fluxion

fluxion of sharp rheum on the Throat and Lungs, attended with heat, oppression in the breast, and a *spitting of blood*. In others there is a short, dry cough, and difficulty of breathing which indicates *Tubercles*, or small and hard, livid tumors of the Lungs, like hail-shot.

As the symptoms continue, the body begins to waste and fall away; being not only unduly nourish'd, but its discharges much greater than its supplies. The fever increases, and comes on in the evenings with chilness, like a slight ague-fit; it is usually followed with thirst, flushings in the face, a burning heat in the palms of the hands, and towards morning goes off with a profuse sweat, and mitigation of the symptoms.

If the *Night Sweats* are too suddenly restrained by accident or design; a *Diarrhæa* or looseness follows; and where that is too hastily stopp'd, I have observed a *Dropfy* sometimes follows with *swelling of the feet*

and legs, an increase of the spitting of blood, or a salivation, and Thrush; all which denote the rapid and dangerous advances of the disease.

In consumptive habits, therefore, the most rational and effectual means either to *prevent, relieve, or cure* the disease, will be to *strengthen the Lungs, and abate the circulating force on their weak vessels*, so as to hinder, if possible, the *spitting of blood* from coming on; or at its first appearance immediately to use such remedies as are most likely to take it away; for the Lungs being only weak and tender, but as yet whole and entire, there may be reasonable hopes of a cure.

From whatever cause the spitting of blood arises; *Bleeding* should be directed in small quantities, and frequently repeated as often as the least *heat, oppression, or sense of fulness is perceived in the Breast or Lungs*. The weakness of the patient should not deter her from submitting to this method; for her principal hope should be placed

placed in this evacuation seasonably directed, which by lessening the force of the disease, will not diminish, but restore her strength.

I do not however mean, that we are to be extravagantly profuse of that vital fluid which nature is at so much pains to prepare; for, although of all *chronic diseases*, a Consumption of the Lungs is most commonly attended with inflammation and a slow fever; yet *Bleeding* ought never to be directed without proper advice, and every prudent caution.

By an abuse of this remedy, I have seen instances where the patient, from a Consumption, has been hurried into a *Dropsy*; to which she will be the more subject, as the blood is generally poor, and watery, when the Lungs are weak and defective in their office.

Where this consequence is to be feared; an *abstemious diet* may be substituted for bleeding; for thus, by lessening the quantity of food, there will be a gradual sub-

traction from the quantity of blood, and the vessels will contract and so accommodate themselves to what remains, as to render the patient less liable to faintings, excessive weakness, or a Dropsy. In such cases, the *Peruvian Bark* with *Nitre* or *Chrystals of Tartar*, by strengthening the body, will be found of considerable service.

Except in the *Nervous Consumption*, a very spare diet of *milk*, *vegetables*, and *ripe fruits* of the acescent kind will afford relief; and the patient should almost entirely abstain from animal food, and wine, or fermented malt liquors. For common drink, pure spring water, boil'd for a few minutes and pour'd on toasted bread, with the addition of orange juice will be proper, and if her habit is costive, *Imperial Water* may occasionally be used.

After the symptoms of fulness are thus removed by bleeding and abstemious diet, which will allow the weak vessels to contract and become firmer; an infusion of *Peruvian Bark*
with

with *Nitre* or *Elixir of Vitriol* may be given twice or thrice a day, and the patient should daily ride on horseback, when the weather is fine, at least two hours before dinner, or longer if her strength will permit.

The honest and inestimable *Sydenham* solemnly declares, that the Peruvian Bark is not a more certain cure for an intermittent, or mercury for a venereal lues, than riding on horseback is for the cure of a Consumption.

Walking is the most general exercise of of the body, but riding being only a kind of *passive motion*, fatigues much less; and as it gently agitates the stomach, bowels, and liver, it becomes of the utmost service in assisting the distribution of blood through these, as well as all the other vital parts of the body.

Sleeping in a small confined bed-chamber on the ground floor, or sitting in very warm rooms are highly pernicious; for in proportion as the heat between these and the
common

310 OF A CONSUMPTION; AND

common atmosphere is destroyed, the patient will be more or less liable to an obstructed perspiration, when she breathes the open air: She should therefore avoid the extremes of heat and cold, and more especially the moist, night air; sharp, easterly winds, the cold bath, or whatever might turn the current of blood inwards upon the Lungs. Coughing, straining, or loud speaking, particularly in the time of extreme anger, are dangerous, as well as all violent agitation of body or mind.

Should blood at any time escape from the Nose, or Piles, it ought not to be suppressed, especially if the patient is irregular or obstructed; for where there is pain, fever, or tendency to inflammation, I have known such a discharge productive of relief.

Instead of this simple method of treating a *Consumption*, deduced from the true nature of the disease, and the structure and use of the affected parts; *Spermaceti*, and other oily medicines have generally been directed under the
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name of Balsamic Emulsions: But if those mixtures would effect a cure; as the patient is generally pretty well supplied with them, we should not find a *Consumption* the prevailing Disease of this Country.

Such things are so far from relieving, that they are found to do manifest harm, by palling the stomach and destroying the appetite: Besides, all fat and oily substances acquire a degree of sharpness, by the feverish heat of the body, which is highly injurious; they increase the *Rancidity* of the bile, and dispose the blood to putrefaction; all which effects directly oppose the intention of cure; and it is for this reason, that the use of Milk is forbid to such patients as have much Fever; but if it is allowed at all, the Cream, or oily part should always be taken off.

The *Milk* of animals being little more than *refined Chyle*, may be looked upon as the natural food of both the young and old: It wants no assistance from the stomach, but passes from thence into the blood with very little

little alteration: Hence may be seen how much better this balsamic emulsion is adapted to nourish and support the strength of consumptive people, than any other.

It partakes both of an *animal* and *vegetable* nature, and retains, in degree, the qualities of the aliment from which it was prepared: The milk of Cows, for instance, which have accidentally fed on *elder leaves*, or *meadow garlic*, is strongly impregnated with the flavor of those vegetables; and this may suggest a hint how it might be transmitted in the blood of consumptive patients in a *medicated state*, when taken fresh and in large quantities.

I know it is generally supposed that medicines lose their power before they can reach the affected part; and doubtless this in some measure is the Case; but the objection is less applicable in Consumptions than any other diseases; since there is no part of the body to which their virtues may be so *perfectly* and *speedily conveyed* as to
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the *diseased Lungs*, through which the whole mass of blood mixed with fresh, *medicated Chyle*, is continually passing.

It appears by experiments, that our food is changed to chyle, and passes into the blood in the space of *six hours*. Chyle having undergone the digestion of one animal, still preserves the qualities of the Aliment from which it was prepared; and most probably will retain them, in a considerable degree, even when mixed with blood in the Lungs of consumptive people.

But although *Milk Diet* may therefore prove beneficial; neither this natural Balsam taken into the body by the stomach, nor any subtile, *balsamic Æther* immediately received into the Lungs themselves, can effect a lasting cure, without due regard to the Regimen of *Air, Exercise* and *Diet*, as well as the *Abatement of force from the Blood*, and *Atmosphere* continually acting on their weak vessels; which, collectively, may be considered as the *very Basis on which a Cure will depend*.

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Milk

314 OF A CONSUMPTION; AND

Milk is composed of three parts, viz. *Cream* or animal oil; *Curd* or a cheefy substance; and *Whey* or a watery part mixed with the salt or sugar of milk: The last, in weak habits attended with Fever is best; without Ass's milk can be procur'd, which affording but a small quantity of Curd and Oil, is lightest and preferable to all the rest, Woman's milk only excepted. Mare's, Goat's, Sheep's, and Cow's Milk are next in degrees of goodness, as beneficial to consumptive people.

Those who expect the benefits of *Milk Diet* in its full extent, instead of trifling with it in the usual manner, must take it perfectly fresh in the quantity of half a pint three or four times a day; that is, they should in a manner live upon it; for, although it may not at first agree with those accustomed to animal food; if properly manag'd and persisted in, it will at last become grateful, more friendly to the stomach and bowels, and restorative to the constitution than every thing besides.

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If it curdles, or lies heavy on the stomach; *Seltzer-Water* in the quantity of a third part may be added, or a little *Magnesia*; should it prove too laxative, one drop of the chemical *Oil of Cinnamon* on sugar, or a small quantity of the *Sugar of Roses*, will remedy that inconvenience.

In Consumptions arising from a putrid, scorbutic cause, I have often directed *Butter-Milk* with great relief to the patient, especially when it had acquired a slight degree of acidity by keeping.

Where *Tubercles* in the Lungs were suspected, I never found any thing relieve the symptoms so much as fresh *New Milk Whey*, sweetened with *Honey*, and the addition of a very small quantity of fixed *Alkaline Salt*; especially if taken after bleeding and gentle evacuations. The liberal use of *ripe Fruits*, and Almond Soap mix'd with Chocolate, according to the Italian custom may also prove beneficial. The warm vapor of hot vinegar and water frequently received into the Lungs thro' a fine sponge, will also be found of real service.

It would be useless to enumerate the various *pectoral* medicines as they are speciously called; in reality, those vegetables which best deserve that name, if we are to judge from their effects, are *bitterish* and *diuretic*, and act by purifying the blood and strengthening its vessels.

The white of fresh, raw Eggs is a balmy *animal Soap* of exquisite fineness, fit to nourish and repair the body; it will gently open obstructions and give balsam to the blood, being exactly similar to its Serum or wheyey part. By the heat of the stomach it will gradually dissolve, but spirituous liquors, or heat applied in a violent degree turn it into an indigestible, horny substance, void of all nourishment.

Take the Milk or Emulsion of sweet Almonds made with pure Bristol, or distill'd water, one pint; the Whites of four eggs perfectly fresh; Minorca Honey half an ounce; beat them well together for ten minutes or more, and strain through a fine hair sieve.

Of

Of this Emulsion, which is perhaps the *greatest Restorative in Nature*, the consumptive patient may take a large tea-cup full three or four times a-day: It will not curdle or load the stomach, and is much superior to all the *mock Ass's Milk* I have ever tried, being composed of a saponaceous, vegetable, and animal fluid, rendered palatable by the essence of flowers or *Honey*, the most exalted of all balsams whatever.

Blisters, and Issues may be of some service in the *scrophulous, venereal, or scorbutic Consumption*, by evacuating part of the offending humours; but nothing, save that which will thoroughly purify the blood, and expel their *corrupting Leaven*, can work a perfect cure.

A Nervous Consumption arising from grief or anxiety of mind, must be treated as already directed in the section on *Low Spirits, and Melancholy*; but above all, the cause which distresses the mind, and destroys the *nervous influence on the bodily organs*, should, if possible, be removed.

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As to the general regimen of diet, every thing that is salt, high seasoned, or smoke-dried, ought to be avoided. When it is proper to allow animal food, it should be light of digestion, and of the most nutritive kind, such as chicken, veal, or young rabbit; also the glandular parts of animals, as sweetbread, or brains.

Fresh Eggs slightly poach'd, and shell-fish are proper, particularly *Craw-fish* and *Oysters*; of other kinds, whittings, soles, and flounders are preferable to the rest. Thin *Jellies* may also be sparingly given, but they are not so beneficial as commonly supposed.

It ought to be a general custom with the patient to eat often, and in very small quantities, because the frequent supplies of *fresh chyle* will in some measure counteract the putrid tendency of the lungs; and by taking little sustenance at a time, the stomach will be better able to dispense with it: By such means she will also avoid those *hectic heats* and flushings in the face, arising from

from the increased motion of the blood by an addition of too much chyle.

Those are the several Rules and Cautions which I would wish to recommend for the *Prevention, Relief, and Cure of a Consumption*, here placed in a *new Light*; but they ought to be considerably varied according to the state of the Disease, the nature of its symptoms, and the difference of the patient's age and constitution. I am disposed to hope the Reader will, from thence, receive useful information, being as fully persuaded of the reality of what I have advanced, as Experience and Practical Facts can make me.

SECTION

SECTION XII.

Of the Dropsy, and its Method of Cure.

ABOUT *nine hundred* people in London die yearly of the *Dropsy*, of which number, Women make by far the greatest part; being much more subject to it than men, from the natural softness, and delicacy of their solids, their sedentary life, and the irregularities, or excess of the discharges peculiar to their sex.

To enter professedly into a detail of the various kinds of Dropsy would far exceed the limits of my design; I only mean to treat of those most frequent, namely, the *Ascites* or Dropsy of the belly, the *Anasarca* or that diffused over the surface of the body, and a *Dropsy of the Womb*, and its contiguous parts.

The human body has two sorts of vessels opening into all its cavities; the first pour
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out a fine fluid to moisten their contained parts, and are called *Exhalents*; the other imbibe the superfluous moisture, and are called *Absorbents*. Hence it will follow, upon the most simple principles, that when this fluid is supplied by the *Exhalent Vessels*, in a greater quantity than the *Absorbents* can suck up, the watery part of the blood will be gradually collected in the cavity of the belly, and a *Dropfy* must ensue.

The fluid here spoken of becomes perfectly visible in the *Steam* arising from the internal parts of animals opened immediately after death; so that it is evident, there is a kind of obscure circulation going on in all the cavities of the body, by one set of vessels pouring out a watery vapor, and another as constantly taking it up, lest it should too much abound.

Whatever weakens the vascular system, and renders the blood thin and watery, will dispose the body to a *Dropfy* by lessening the power of the *Absorbents*; the principal of

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which

which are a *bad Stomach*, *weak Lungs*, or a *diseased Liver*; for when those Organs execute their office imperfectly, the chyle will be crude and unconcocted, and the blood instead of being rich and well prepared, will become poor and watery.

The abuse of *blood-letting*, an *immoderate Flooding*, *excessive Discharge of the Menses*, or *Fluor Albus*, *profuse Night-Sweats*, or *long-continued Diarrhæa* and an *Ague*, will all diminish the circulating power, and render the motion of the blood so slow, that its watery part may separate from the rest, and lay the foundation of a *Dropsy*. Strangulation or pressure on the veins, and those vessels called *Lymphatics*, as in women with child, where the enlargement of the womb prevents the free circulation of blood, will also occasion dropfical swellings.

The more remote Causes of this Disease, are Intemperance, particularly the Use of spirituous liquors; low, damp situations; a watery Diet; cold, moist Air, and the want of sufficient bodily Exercise.

No Remedy has been more abused than Bleeding, especially among women, who generally have recourse to it upon the most trifling occasions. *Blood* is the very *Fountain of Life*; and where weakly people are deprived of too large a quantity, the circulation will flag, and what remains cannot be carried far enough through the vascular system of the body to support its natural discharges: Hence a load of gross humors will be collected, producing a bloated habit, ending in an *Ague* or *Dropfy*.

Indeed, in Acute Diseases where the blood offends in quantity, *Bleeding* is often a speedy and effectual remedy; but in *Chronic Cases*, where it is rather faulty in *quality*, then it will be highly pernicious. However, should it, on particular occasions, appear necessary; the benefits arising from it may be much more safely obtained, in languid constitutions, by spare diet, and gentle laxatives. In short, as before observed, the great pains which Nature takes to prepare

this *vital Fluid* shews, that we ought not profusely to throw it away.

Dropsies are generally attended with a slow Fever, intolerable Thirst, and great Defect in the discharge of urine. The Pores of the skin are also shut up, so that those fluids which ought to pass off by the natural outlets being now retained, will overflow the internal parts, and drown out, as it were, the very principles of life.

Where a Dropsy suddenly comes on by the stoppage of some natural Evacuation, it may be almost certainly cured, if taken in time, especially when the patient is young; but if on the contrary it is of long standing, arises from a bad constitution, and decay of the internal parts, the event will be very different; for here the bowels being long oppressed, and soak'd in the collected water, will entirely lose their natural power, or even become putrid; consequently, no absorption of the fluid can be expected.

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We may here borrow an illustration from *Vegetables*, which will render this circumstance more plain, and intelligible. If a Rose, or any kind of plant, is cut from its stalk, and immediately placed in water, it will imbibe or drink up a sufficient quantity to keep it alive, a considerable time; during which, the *small Buds* on the same stalk will expand and blow; but on the contrary, as soon as the stalk withers, and the vessels of which it is composed lose their absorbing power, then the vegetable will droop and die. By the same absorbent property, Corn has been observed to ripen and fill considerably after being cut down, where a fall of dew or rain happened before the absorbent power of the stalk was destroyed.

The intention of curing a Dropsy of the belly will be, to evacuate the contained water, and prevent it from collecting again. Whatever increases bodily strength will be found to assist in carrying off the water, by giving power to the absorbent vessels.

Some Dropsies, therefore, may be cured, in the beginning, by the *Bark*, *Steel*, and *Exercise*; but this method will not answer, except where the strength is but little impaired, the vital parts perfectly sound, and the absorbing power strong.

In general, the Cure will be most safely attempted by *promoting the Urinary Discharge*; particularly when the Complaint is of long standing, and the bowels are weak or unsound.

If *Vomits* and strong *Purgatives* are given, it ought only to be in the early state of the Disease, where the patient is young, and the internal parts yet remain firm and uncorrupted; for when they are not managed with the utmost judgment and caution, they will increase the patient's Weakness, and aggravate the Disease.

Sometimes, indeed, I have observed they promoted the secretion of urine, when *Diuretics* failed, and in such cases, they may be continued with advantage; but after their operation, it will be proper to direct an infusion of the *Peruvian Bark*, with the spices
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the better to strengthen and brace up the weakened vessels, as the water is drained off.

Such as are dropfical should resolutely abstain from watery fluids, and quench their thirst with orange juice, or eating fruit. They should confine themselves to dry food, and use constant exercise on high, chalky, or gravelly situations, where the air is dry, and pure.

Nitre should frequently be given in such Broths as the patient may occasionally take for nourishment; and Chrystals of Tartar may be added to those liquids which her immoderate thirst requires: In cold habits, a little Rum or French Brandy may be taken in an infusion of Juniper Berries; but although the quantity of her liquors can never be too small; I would particularly recommend their frequent change; having observed that those least habitual to the constitution, soonest pass off by the urinary discharge.

From

From the use of the Diuretic Mixture, no. 56, which also operates by stool, I have known the belly sometimes unloaded of large quantities of water. Fixed Alkaline Salts, with the Spices infused in Rhenish Wine, are also safe and effectual remedies for answering the same purpose; but so strangely diversified are the effects of different medicines, by different constitutions, that it is impossible precisely to determine what they will be, till after a fair trial.

By a steady compliance with *such Regimen*, assisted by the power of Medicines, many of the *dropfical might perfectly be cured*, who through indolence, or an extraordinary complaisance to their palate, at last fall victims to the Disease.

It ought to be remarked, that all such Medicines as are intended to promote Urine, will operate best when the patient uses Exercise in the open Air; it may always be looked upon as a bad sign, where it cannot

not be brought to its natural quantity, notwithstanding their use.

However, people labouring under this disease should not be too hastily given over as incurable, since Medicines sometimes produce very happy and extraordinary effects, and restore the patient, beyond all expectation, even in advanced age.

About six years ago, I was desired to visit a Tradesman in the Strand, who was *dropfical*. He had a slow fever, attended with unquenchable thirst, a cough, and difficulty of breathing: His skin was extremely *yellow*, his legs, thighs and belly were much swelled, and his urine, which for a long time had been small in quantity, was thick and high coloured like coffee-grounds. He had taken medicines for several weeks, but found himself no better, and was thought to be dying. I directed him *powder'd Squills*, with Soap and Aromatics, to be given in pills twice a-day with a cupful of the *Apozem*, no. 57. He found almost immediate relief, made large

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quantities

quantities of water, the swelling of his belly, legs and thighs visibly decreased, and the yellowness of his skin disappeared. His thirst and cough abated, he breathed with more ease, and rested at nights. He then took the *Peruvian Bark* with *Nitre*, and Strengthening Medicines ; in about three weeks he was perfectly cured, and ever since has remained well.

In September, 1775, I attended Mrs. P. a Lady, in Fludger Street, Westminster, aged sixty-nine. Her breath was short, the stomach hard, and her legs and thighs much swelled. Considering her advanced age, I had but little hopes of her recovery ; but from the use of such Medicines as chiefly operated by Urine, the swelling of her legs was reduced, and the difficulty of breathing, which before had hindered her from sleeping, was so much relieved that she afterwards had natural rest. I prescribed a strong Decoction of the *Bark* with Spices, to warm and invigorate the weak bowels, by
which

which method she perfectly recovered, and at this time is hearty and well.

As the water is gradually carried off, a broad flannel roller applied moderately tight round the belly will afford relief, by diminishing its cavity, and resisting the future influx of water. A volatile Liniment, rubb'd in upon the belly once a day, will also correspond with the same intention, by invigorating the internal parts.

When the body becomes enormously enlarged, and all other methods have been tried in vain ; *Tapping* is the last expedient to free it from a load of water and render the remains of life more tolerable ; tho' unfortunately, that operation effects not a perfect cure ; but on the contrary, the water is found to collect much faster after it than before.

The ANASARCA or diffused Dropsy, proceeds from water collected between the skin and flesh, in that fine, cellular or spongy substance, every where investing the surface of the body ; when the cells of this mem-

brane are filled with fat, the skin is plump and smooth ; but where that is wanting, it becomes loose and wrinkled, as in people naturally very thin, or those exhausted by long sickness.

This is the part which butchers so frequently blow up, to give their meat a finer appearance ; but for obvious reasons, it is a custom fitter to be allowed among *Hottentots* than a civilized people.

Such as are recovering from tedious illness are most subject to this kind of dropsy ; particularly if they keep late hours, or replenish their weak vessels too fast by full diet. Exposing the body to a stream of cold, damp, night air, or easterly wind ; especially when standing still, may also give rise to this disorder, by stopping perspiration and confining the watery vapor under the skin ; and this will be most likely to happen when the blood is poor and watery, and its circulation flow and weak.

This

This complaint generally begins with a watery swelling in the feet and ancles, which pits or retains the impression of the finger, and increases towards night. By length of time, it ascends, overspreads the surface of the body, rendering the skin numb and insensible, and if neglected, at last degenerates into a *Dropsy of the Belly*, which thus occasioned, for the most part is incurable.

Under such circumstances it will be advisable to make *scarifications* thro' the skin, on the inside of the ancles or great toes, taking care to support the strength as the water drains off, and at the same time, to guard against a mortification of the scarified parts, by giving the *Bark and Nitre*, should they become necessary.

Since this Disease generally arises from a stoppage of the pores; the most rational method of attempting its cure will be by *sweating* in flannels; not by means of drinking hot liquors, but the exhibition of *Antimony* join'd with *Opium*, as at no. 58. One of these
powders

powders may be given twice or thrice a-week going to bed, so as gently to raise a *sweat*, which may be supported by a spoonful or two of the Julep, no. 59.

In due time, as the patient grows cool, her skin should be well rubb'd with hot Flannels, and afterwards dry linen may be put on. During the intervals, the body should be strengthened by the *Peruvian Bark* with *Elixir of Vitriol*, *Steel*, and *Exercise*; and if the internal parts are sound, the *Cold Bath* will be the most likely remedy to prevent a relapse.

A DROPSY OF THE WOMB may arise from any cause which totally closes its orifice, joined to a preternatural Secretion of that fluid which moistens its internal surface. If the patient is arrived at years of maturity, the Periodical Discharge will also now be retained, and occasion a gradual swelling of the belly, creating a suspicion of *Pregnancy*, with which this malady is sometimes complicated.

Some-

The water is sometimes contained in cysts or little bladders connected with each other, like a bunch of grapes, which have one common stalk adhering to the womb. These may proceed from fragments of the after-burden retained after delivery, or such injuries as destroy the natural office of the womb.

The parts subservient to the womb, viz. the *Ovaria* and those *Tubes* or little canals proceeding from it, are also sometimes the seat of an *encysted Dropsy*; from which the included water cannot be emptied, as when contained in the cavity of the belly.

That Dropsy which is confined to the cavity of the womb, may be certainly cured by the introduction of such a *Canula* or proper tube as will keep its orifice constantly dilated, and allow the contained water to escape. The Secretion of Urine should at the same time be promoted, and all possible means used to prevent a relapse. A mild, astringent Injection may therefore be used twice a-day, to strengthen the weakened vessels;

vessels; and the belly should be bound with a flannel swathe moderately tight. The patient should also take an Infusion of the *Peruvian Bark* with *Bitters* and *Elixir of Vitriol*, and use moderate Exercise as her strength will permit.

CORPULENCY implies such a preternatural enlargement of the body, as renders it of an enormous size. It is sometimes *hereditary*, or may be *acquired* by excess in diet, and the want of sufficient exercise to assist the vital powers in carrying on the natural discharges; consequently, from this disproportion between the supplies, and excretions of the body, a load of Juices will be accumulated which renders Women unlike themselves, clogs the movements of life, and shortens its natural period.

The best means to remedy this inconvenience are chiefly in the patient's own power, especially where *Corpulency* is not hereditary. She should take *less Food*, and
use

use *more Exercise* ; the body should be kept constantly laxative, and the secretions of *Perspiration*, and *Urine* promoted ; the first may be effectually answered by frequent *Exercise* ; the last by repeated doses of *Vinegar of Squills*, in the quantity of half an ounce or more at a time, as the stomach will bear.

VEGETABLES should constitute the principal part of her Diet, among which *Acid Fruits* are extremely proper. Fat, animal food is pernicious ; she should avoid the cold, moist air, and reside as much as possible in high situations, where the air is dry and pure.

When the gross habit is somewhat reduced ; an Infusion of *Peruvian Bark* with *Elixir of Vitriol* and the *Cold Bath* will be found highly beneficial, and greatly contribute to secure the constitution from a *Relapse*.

C H A P. IV.

S E C T I O N XIII.

Diseases of the Skin ; and of Glandular, or cancerous Swellings of the Face, Neck, and Breasts.

DISEASES of the Skin, particularly those of the Face, being not a little distressing to women, as injurious to their beauty ; it becomes requisite to consider their nature and treatment, together with such *Glandular Disorders* as arise from similar causes. I do not however mean to present the Female Reader with *Cosmetics* or beautifying Washes, but rather to caution her against their indiscriminate and improper use.

Breakings out on the Skin, were imputed by the ancients to a hot Temperament of
the

the Liver; but, waving such opinions, we may affirm with practical certainty, that they are generally the consequence of *latent Diseases*: They also may arise from a Defect in the natural discharges of the body; either of which will destroy the purity of the blood.

Sometimes they proceed from a particular fault in the fabric or texture of the skin, by which its juices are either obstructed, or changed from their sound state, by a vitiated disposition of its vessels or strainers.

The first of these should be regarded as a *general Disorder*, which can only be cured or safely treated, by *gentle Evacuations*, and *such Medicines as correct and sweeten the blood*; together with Blisters, Issues, and the like, which may assist in carrying off part of the offending humours. The last being a *local complaint* may be successfully treated by External Applications.

It requires however the utmost caution properly to distinguish the difference of such

340 DISEASES OF THE SKIN; THEIR

Maladies; since an error of judgment has been known to endanger the patient's life: If, for instance, those impure juices, which Nature for her security had thrown out to the surface of the body, are suddenly stopped, or driven back into the blood; *Sickness at Stomach, Giddiness of the Head, Hysterics, and Asthmas*, or even *Convulsions*, and *Death* have sometimes been the consequence; according to the repeated testimony of medical writers.

Considering the frequency of *External Applications*, the nature of their composition, and little caution with which they are daily used, I have no doubt but many serious effects arise from them, greatly injurious to health, which are either concealed or imputed to other causes.

In whatever shape Diseases of the Skin appear; the symptoms which preceded or are subsequent, will best discover their true nature, and shew whether they ought to be

be treated by *internal*, or *external Remedies*, or both.

If the patient was sickly and infirm, if she labour'd under *Rheumatic Pains*, or *Complaints of the Head, Stomach, or Bowels*, before such Inflammation, or Eruptions on the Skin; and of which she is afterwards either relieved, or altogether free; these cutaneous eruptions should be deemed *truly critical*, or the salutary and effectual endeavour of Nature to purify the blood and relieve the constitution.

In such cases, no Medicines, or external Applications ought to be used, except those which relax the skin, enlarge the pores, and correspond with the intention of Nature: For this purpose, the *Warm Bath*, additional Cloathing, or fine Flannels worn next the skin, and plentiful dilution with *Nitre*, will be proper. Should the *Eruption* suddenly disappear, and the former symptoms return; *Antimonials* in very small quantities may then be administered; but
such

342 DISEASES OF THE SKIN ; THEIR

such powerful Medicines ought never to be directed without proper advice.

The medicated, Spring Juices, no. 60, taken twice a-day, by gently promoting the natural discharges of the body, will also be serviceable.

On the contrary, if the patient's habit of body is good, the periodical discharge regular, and the secretions of perspiration, urine, and stool, duly carried on ; but particularly, if after the Eruption, she finds her health the same as before ; then there is reason to conclude, that such Affections of the Skin are only local, and therefore may be relieved or cured by *external Applications*. However, where there is the least probability of being mistaken, it will be best to err on the safe side of the question ; *Nitrous Drinks*, and a dose or two of gentle Physic may therefore be advisable during their use.

I have before had occasion to remark, that the *King's Evil*, *Scurvy*, or *Venereal Lues*,
give

give rise to many *chronic Disorders*; which however different in appearance, from the difference of age and constitution, may yet be traced up to their original source, a *distempered Blood*.

Where the constitution is strong and vigorous, such morbid humours are often thrown on the *Surface of the body*; but when the powers of Nature are weak and languid, they are apt to fall on the *Head, Lungs, Stomach or Bowels*, creating disorders peculiar to those parts, which cannot be effectually removed, till the cause from which they originate is taken away.

Among Diseases of the Skin none is more intolerable to women than a *red, or pimpled Face*; for it not only destroys the beauty and delicacy of the finest features, but is also generally imputed to a cause not very favorable to their sex: However, it may be said with great truth, that many who are extremely temperate, or even abstemious, are notwithstanding subject to this mortifying complaint.

If

344 DISEASES OF THE SKIN; THEIR

If the *Redness* is unattended with eruptions, or sharp humours, and only arises from hectic heats, or a simple weakness of the blood vessels; it may then be cur'd by gentle Evacuations, low Diet, the *Peruvian Bark*, and Cold Bath. The Patient should abstain from Wine, and drink *Imperial Water* at meals, which will keep her cool and laxative. New Milk Whey clarified, with the addition of *Honey*, *Orange Juice* and a very small quantity of *Nitre*, will make an elegant medicated drink, of which she may take half a pint twice a day, with great advantage.

But on the contrary, where the *Eruption* is manifestly owing to sharp *scorbutic Salts* which fret and inflame the skin, or at last destroy its glands; it then becomes an obstinate complaint, and can only be cured by evacuating the offending Juices; together with such Diet and Medicines as will sweeten the blood and render it more soft and balmy.

Here

Here the use of repelling washes would be attended with the utmost danger, as several instances might be adduced to prove that diseases of the Head, *Blindness*, *Convulsions* and even *Madness* have been the consequence of driving back offending humours on the Brain and Nerves.

In this place it will be proper to rectify a prevailing error respecting the use of that popular Remedy *Vegeto Mineral Water*, as well as all other preparations of *Lead*, in whatever shape or form. This application, in its own nature, an excellent one, by becoming general is often liable to abuse. I have known one instance where improperly applied, and to great excess, it manifestly brought on a *mortification* of the part, by crisping up the vessels and deadning their vital power.

In the dispersion of hard tumors, it does not, like *Mercury*, act by dissolving the stagnating, impacted fluid, as asserted by some, but produces its effect by bracing up

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346 DISEASES OF THE SKIN; THEIR

the vessels of the part, so as to repel their contents. How far it may be endowed with a *sedative power*, I shall not take upon me to say.

GLANDULAR TUMORS or swellings on the Face, Neck, and Breasts often proceed from a *scrophulous Cause*; or from the relics of diseases terminated by an *imperfect Crisis*; as that of the *Small Pox*, or other eruptive Fevers of the malignant kind.

They do not, however, always imply a distemper'd blood; for sometimes they are occasioned by blows, or pressure on the Nerves and Blood-vessels; a stream of cold air admitted to the part, or acrid external applications absorb'd, and conveyed by the lymphatic Vessels to the contiguous gland.

Diseases of the Glands, especially those of the *Neck*, or *Face*, should always be cautiously attended to in the very beginning, lest they become *cancerous* and destroy the patient, or end in a collection of matter, and by breaking leave an *ugly scar*, which during life,
will

will carry with it the unwelcome appearance of the *Scrophula* or King's Evil.

That such glandular swellings should be owing to the severity of cold, moist air, in parts of the body so much exposed to its influence, is extremely probable; especially since they generally appear in the Winter season; and as far as I had an opportunity of observing, are very uncommon in the dry, warm climates of *Italy* and *Portugal*; whereas in *Holland*, the *Austrian Netherlands*, and other damp situations, they are prevailing disorders.

The inhabitants of the *Alps*, indeed, especially Women, are subject to an enormous swelling of the throat, called *Bronchocela* from its adhering to the upper part of the Wind-pipe. Such tumors have generally been ascribed to their drinking *Snow Waters*, but are more probably owing to the intense degree of cold, which constricts the glandular ducts, and locks up that fluid which ought to pass freely through them; other-

wife, why should not the glands in the arm-pits and other parts of the body be equally affected with those of the throat?

When at *Piso* in *Italy*, I remember to have seen a remarkable instance of the *Bronchocele* in the Mistress of the Hotel: The tumor which was of extreme bulk hung down from under her chin and rested upon her breast, yet to my surprize she appeared perfectly chearful and in good health. Such tumors are not apt to become cancerous.

For a more particular and circumstantial account of the nature and treatment of the maladies under consideration, the Reader is referred to the Fifth Section of this Work, on *Schirrous* and *Cancerous* Tumors; I shall only here observe, that when *Glandular Swellings* are situated on the Neck or Face, they ought, in the Winter season, to be carefully defended from the cold air, by all possible means.

When they become painful and inflamed, no *Mercury* should be internally given, or
exter-

externally applied; nor should they be tamper'd with by any thing else that has the least tendency to irritate or disturb them. The patient should lose blood at the arm, live on slender diet, and keep her bowels laxative; her pores should be kept gently open by *nitrous Drinks*, and if necessary to mitigate pain or procure sleep, she may also take an *Opiate*.

I cannot conclude this subject without remarking the extraordinary *effect of Lightning* in dispersing a schirrous tumor of the breast, in a gentlewoman, who from thence received a stroke as she was standing at a Window observing a heavy Thunder shower: It set fire to the thatch of the house, at the same time, forced the chimney-piece from the wall, and raised the carpet from the floor.

This case was communicated by Dr. Eason of Dublin, to Dr. Duncan, and appeared in the last number of the *Edinburgh Medical Commentary*: It deserves the attention

tion of the curious, whether considered in a philosophic, or medical view.

By some *Experiments* made at *Upsal*, several Years ago, it appears, that knots or *Ganglions* of the tendons were perfectly dispersed by *Electricity*; which in its nature, as far as we know, is exactly similar to that of *Lightning*. In indurated, glandular swellings of the neck, or breasts, I would therefore recommend a trial of its effects, as ingeniously suggested by the Author of the preceding, extraordinary Case.

SECTION

S E C T I O N XIV.

The Influence of the Passions on the Body and Mind; and Effects of Climates, or sudden Changes of Weather on delicate Constitutions.

I N the course of the preceding Work, I have had frequent occasion to remark the general Influence of the Passions, the Effects of Weather, and the salutary power of fresh Air, simple Diet, and moderate Exercise: But as I could not then, without tedious digressions sufficiently expatiate on their nature and manner of acting on the Body and Mind; several Particulars *equally applicable, and essential to the Health* of both sexes; as well as a short Recapitulation of the whole, were reserved for the subject of this, and the following Section.

By the *Passions of the Mind*, is meant, those faculties with which it is endowed, and which naturally exerted, constitute the very *Elements of Life*; but when perverted, or erring in extremes, become destructive
to

352 INFLUENCE OF THE PASSIONS

to its existence. Thus the extravagance of *Hope* may be exalted into Enthusiasm little short of Madness; and excessive *Fear* may sink into Despair.

The human body is made up of such frail materials, that they must necessarily decay, and often be put out of order. We are not only subject to pain, and diseases; but also to irregularities of the Passions, and Influence of Weather; all which affect the *Spirits, Intellect, and Memory*, so as to render the same person very different, at different times, in thinking, speaking, and acting; as any one, who is not *robustly insensible*, must naturally discover from his own feelings, at one time or other.

Considering its admirable structure, the number and exquisite finess of its movements; that in a healthy state, all its parts must conspire to perform their proper office, and that the least failure, generally occasions some disease; it appears matter of astonishment that we are more than the transitory Beings of a day.

The

The periods of human Life distinguished by *Youth*, *Maturity*, and *old Age* are not inaptly compared to the Seasons of *Spring*, *Summer*, and *Winter*, which complete the revolving year; for each is attended with certain peculiarities which sensibly affect the constitution.

In *Youth* or the first stage of life, the circulating force of the blood being more than equal to the resistance of its vessels, the solids are thrust out and extended. After *Maturity* or Manhood, the power of the solids and fluids continues nearly equal for several years; and this period constitutes the prime or summer of Life. In the last; the quantity, and circulating power of the blood is every day diminishing, and in time, overcome by the increasing resistance of the solids, which introduces *old Age*.

Every period has its attendant Disorders: The first subjects the patient to a *Flux of Blood* from the Nose or other parts, in consequence of the stress then laid upon the

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vascular

354 INFLUENCE OF THE PASSIONS

vascular system. *Glandular complaints* and eruptive Fevers as the *Small-pox* and *Measles* also at this time prevail.

In the second ; from a vigorous circulation of blood, and prevalence of the Passions, he becomes liable to *Pleurishes*, *Inflammations of the Lungs*, and a *Consumption* : But where temperance is observed, and the vital parts of the body are naturally sound, this may be deemed the most healthy period of human Life : It relieves, or cures some Diseases and occasions few ; for then *Scrophulous Complaints*, and habitual *Convulsions* have been known to disappear.

In the last period ; the limbs become contracted, and paralytic ; the Sight, Hearing, and Intellect are impaired, from a rigidity of the solids, and defect of circulation. The Passions subside, and every vital principle is at last extinguished.

From what has preceded, it follows, that animal bodies continue to grow, so long as the circulating power of the blood is
greater

greater than the resistance of its vessels; and when there is an exact ballance between the two, animal growth will be totally at a stand. As age gradually hardens the vessels, they lose their elastic power, which being now an over-match for the force of the Heart; *old Age* commences, the circulation languishes, and at last the animal dies.

Perhaps, however, very few can properly be said to die of mere old age; for even the life of *old Parr* might probably have been still prolonged, had he not changed his air, and manner of living.

Here we may observe, that by a kind of *fatal Necessity*, animal bodies are worn out and destroyed by that very cause which constitutes the principles of life, namely, the circulating power of the blood; and consequently, that the number of years to which men may attain, will probably be in proportion to the *velocity of the Pulse*: If so, it will then follow, that such a particular state of the constitution as produces the greatest degree of strength and vigor in youth, is not

356 INFLUENCE OF THE PASSIONS

most likely to prolong life; but on the contrary, that those of weak solids, and delicate habits in their early state, grow old more slowly than others; and if the *Viscera* are sound, become for a time, more strong and healthy from the effect of age.

The gradual, and mechanical change thus produced in the human body by the effect of age, from infancy to the latest period of life, is continually introducing a succession of new sensations, and consequent ideas, which alter the bias, and diversify the operation of the Mind; totally abolishing some Passions, and putting others in their place. Thus, Mirth, Vanity, Indiscretion, and the immoderate love of Pleasure, are the unripe product of youth; whilst Austerity, Scrupulous Caution, Avarice, and a Contempt of Pleasure are the surly offspring of old Age.

“ Behold the Child, by Nature’s kindly law,

“ Pleas’d with a rattle, tickled by a straw :

“ Some livelier play-thing gives his youth delight

“ A little louder, but as empty quite :

“ Scarfs,

“ Scarfs, Garters, Gold, amuse his riper stage,
 “ And Beads and Prayer-books are the toys of age :
 “ Pleas’d with this bauble still, as that before ;
 “ ’Till tir’d he sleeps, and Life’s poor play is o’er.

A. POPE.

Particular habits acquired by long custom are also found insensibly to gain ascendancy over the most intelligent minds, and to produce very extraordinary effects, to the benefit, or prejudice of Health; as well as to the moral, or immoral tendency of the Passions.

The Body and Mind are so disposed by the Author of Nature, that they cannot act separately, but are mutually affected *by the sole mediation of the Nerves*, from such impressions as are alternately made on the one or other ; so that the several Passions, can only produce their effects, whether good, or bad, *by increasing, or diminishing the Influence of these sensible Organs on the bodily System.*

When any injury is done to the Brain or Nerves by external violence, Intoxication,
 or

or febrile Delirium; the distinct exercise of the mental faculties immediately vanish, and the whole animal machine is put into disorder. On the contrary, although the bodily Organs remain perfect and in the due exercise of their functions; so powerful are the affections of the Mind, that *extreme Terror*, or *excessive Joy* will suddenly disconcert the bodily œconomy, and produce *Faintings*, *Convulsions*, or *Death*.

This evidently shews, that many dangerous diseases may be produced simply by impressions made on the nervous System, without any morbid change of the blood; except what arises from the consequence of such external affections. It also appears, that those Remedies which act by strengthening the solid system of the body, of which the Nerves make a part, are of all others the best adapted for the cure of their diseases; but what relates to this circumstance, as well as the power of *Sympathy* between the *corporeal* Organs, and that *sentient Principle* which
 puts

puts them in motion, I have more particularly explained in treating of Nervous Diseases.

If from such violent impressions the most fatal changes are produced ; it must then be allowed, that the *Regimen* or government of the passions is highly essential to health, and therefore becomes an object of medical attention.

The human Mind is principally actuated by two sorts of Passions ; the one elevates, winds up the spring of the Nerves, and as it were lifts it above itself ; such are the effects of *Hope* and immoderate *Joy*. The other, as *Fear* and *Sorrow*, sink it below its natural standard.

Most of the subordinate Passions appear to be compounded of those : Thus the Passion of *Love* is made up by a conflict of the whole ; as Hope and Fear, Grief or Joy, alternately prevail ; and *Terror* is only a species of sudden Fear impressed with the extremest violence.

Those

360 INFLUENCE OF THE PASSIONS

Those *Demons of the Mind*, or malignant feelings, for they deserve not the name of Passions, *Envy, Hatred, and Revenge* require no attention: They ought to carry with them their own punishment, and Scorpion-like, sting themselves to death, as they generally do.

We shall here take a *contrasted view* of the several *dissimilar Passions*, in order to shew their powerful Influence on the bodily system.

Hope, or expectation of approaching good, like a sovereign Balm, diffuses gladness round the Heart, and by acting gratefully on the Nerves increases their power on all the vital parts: It promotes a free circulation of blood, as well as the several secretions depending upon it; assists appetite and digestion, gives strength and vigour to the limbs, renders the countenance chearful, and contributes universally to the preservation of health.

Fear, or the dread of future Ills, on the contrary, deadens the vital feeling of the
Nerves,

Nerves, retards the motion of the blood, and diminishes perspiration; it impairs Appetite, depresses the Spirits, and particularly disposes the body to receive infectious Diseases, as the *Small-pox*, or *Plague*: In a word, it produces all the effects of over fatigue, and consequently tends to destroy the Constitution.

Joy arises from the idea of present Happiness, or of having avoided some impending Evil. This Passion, tho' nearly allied to *Hope*, and when moderate, like it, contributes to Health, has yet been found, when sudden and excessive, to induce a kind of torpor or palsy of the Nerves; to suspend the motion of the Heart, and destroy the patient by a fainting or *mortal Syncope*. *Livius* the Historian informs us, when *Hannibal* overcame the Romans at the battle of *Cannæ*, where fifty thousand men were slain; that two women instantly expired with excess of Joy, on seeing their only sons unexpectedly return, whom they had been told were among the dead.

362 INFLUENCE OF THE PASSIONS

Sophocles being pronounced *Victor* among the Tragic, Grecian Poets, was himself overcome by a tumult of Joy, and forfeited his life to Glory. Such also was the fate of the *Spartan Father* who died embracing his son when crowned with conquest at the Olympic Games.

Sorrow implies some present Calamity oppressive to the *Mind*, from which it cannot be disengaged: It is attended with universal Languor, Loss of Appetite, and Sleep; Giddiness of the Head, effusion of Tears, and Faintings; and by laying continual stress on the Nerves, it weakens their spring and suspends the natural secretions. The Pulse loses its usual strength, and Respiration becomes so difficult, that the patient frequently sighs to relieve himself of a load at the Breast. Thus like a *Vulture* it incessantly preys upon the Heart, wears out the body by a Consumption, and at last puts a period to life.

Terror.

Terror is a species of extreme and sudden Fear, arising from the apprehension of instant Danger. It acts upon the nervous system with the velocity of electric fire; and so increases their Influence on the body, as sometimes to give it a degree of strength and agility almost incredible; but when this momentary exertion is over, a universal Languor and Faintings succeed.

In the time of surprize, the vessels are strongly contracted, and their blood impelled with such violence, that recent wounds have been forced open and bled afresh; an instance of which I have seen: I also knew a lady much irritated and afterwards suddenly struck with *Terror*, from a Pistol rashly presented to her Breast, in whom the blood gushed from her Nose in great abundance.

So vast is the concussion given to the body, in such cases, as to alter the Disposition of its Strainers, to destroy the balsamic quality of Milk in Nurses; and in

others to *turn the Hair grey*; an instance of which happened not long ago at *Hatfield Peveril* in Essex, in a boy who narrowly escaped being drowned.

Agues, Palsy, and a fit of the Gout have sometimes been banished, from the like cause; and the sudden out-cry of Fire, in the dead of Night, has been known to restore the limbs to those who had been lame, and bed-ridden for many years. However strange it may appear, History informs us, that the son of *Cræsus* who before had been *dumb*, when he saw the King his Father about to be slain in battle by an uplifted Sword, cried out with vehemence, *Soldier, hold thy Hand, thou kil'st the King!*

These are the formidable effects of *Terror*, and if there are some instances of their curing Diseases, many more might be mentioned to shew they have often proved fatal, by producing an *Apoplexy*, *Convulsions*, and *Death*.

Anger, or a sense of Injury sustained, produces effects somewhat similar to *Terror*,
but

but scarcely in so violent a degree. When there is a mixture of *Revenge* in this Passion it is often attended with acts of the most horrid cruelty. The Heart palpitates, the Hand trembles, the Eyes flash with rage, and the Countenance alternately becomes red, and pale.

Nothing however is more false and inconsistent with the philosophy of the Passions than the general opinion that *Paleness* always indicates *Revenge*; for it is as frequently occasioned by *Fear*, *excessive Joy*, or exquisite sensibility, as from that diabolical feeling; and it would be easy to prove that the same cause which creates paleness of the Face, at one time, might in the very same Person, make it red at another, according to the degree of strength or weakness then prevailing in the Body and Mind.

Anger has been observed to occasion a profusion of *Bile*, with *Sickness*, *Vomitings* and pain in the Bowels. In those of plethoric Constitutions, it has produced *Apo-plexy*,

366 INFLUENCE OF THE PASSIONS

plexy, *Delirium* or *Madness*; but on the contrary, such as were of a cold, phlegmatic Temperament and subject to *Melancholy*, *Dropfy*, or *intermitting Fevers* have sometimes been remarkably relieved by its effects.

The Passion of *Love*, of all others, is most difficult to be defined; so various are its affections, and invincible is its power, according to Age, Sex and Temperament; or as it is attended by Hope and Fear, Grief or Joy. Whilst one pines in silence and sits “like *Patience* on a Monument, smiling at “Grief,” another becomes frantic, and despairing of what alone could make life desirable, is driven to *Suicide*, and seeks refuge in the Grave!

Love, like the infant blossom of the Spring, fostered by the genial, noontide ray, is nursed by Indulgence and Smiles; but cold Indifference or Neglect blast the promised fruit, and chill it to death.

Many

Many Instances have occurred, where those affected by this bewitching Passion, have become *epileptic* and *hysterical*, or have fell into a *slow*, *Nervous Fever*, *Consumption*, or *Melancholy*; and I have known some cases where these Diseases, thus introduced, in the end, became *mortal*.

When *Love* is mutual, her Attendant *Hope*, that heavenly Maid, presents her nectar'd Cup replete with more than the Sweets of *Hybla*: Bless'd Infatuation, supreme Transport, too exquisite for mortal Sense,—a Banquet for the Gods!

- “ Blest as th' immortal Gods, is he,
- “ The youth that fondly sits by thee;
- “ And sees, and hears thee, all the while,
- “ Softly speak, and sweetly smile.
- “ 'Twas this deprived my soul of rest,
- “ And rais'd such tumults in my breast;
- “ For while I gaz'd in transports tost,
- “ My breath was gone, my voice was lost.
- “ My bosom glow'd, a sudden flame
- “ Ran quick thro' all my vital frame;

“ O'er

368 INFLUENCE OF THE PASSIONS

“ O’er my dim eyes a darknefs hung,
“ My ears with hollow murmurs rung.
“ In dewy damps my limbs were chill’d,
“ My blood with gentle horrors thrill’d;
“ My feeble pulse forgot to play,
“ I fainted, funk, and died away.”

But when *Despair*, accompanied with his
sad, and sickly train of Jealousies, Doubts,
and Fears, administers his Ebon Chalice;
beware the taste, — ’tis nauseous as the dregs
of Gall, and fraught with Adder’s Poison.

“ Thou soft invader of the Soul !
“ O Love, who can thy power controul ?
“ To quench thy fires whole rivers drain,
“ Thy burning heat shall still remain.
“ In vain we trace the globe to try
“ If powerful gold thy joys can buy :
“ The treasures of the world will prove
“ Too poor a bribe to purchase Love.”

If such are the injuries brought on the
constitution by irregularity and excess
of the Passions; it ought to be the care
of every rational Being to guard against
their

their Insults; and to oppose their Effects with becoming resolution, and a virtuous resignation to the will of Fate.

Happiness, and *Misery* are the lights and shades which fill up the outlines in the *Portrait* of human life. Every man naturally endeavours to attain the one, and avoid the other, but by very different means, which are often disproportioned to that end.

We frequently deceive ourselves both in the pursuit and enjoyment of our wishes. Extravagance of Hope often ends in disappointment; and even a constant series of pleasurable events will at last lose their power. To give them true relish, and make them lasting; the mind must refer to some former, painful sensations.

Thus a person who always possessed Health, is scarcely sensible of its value; but when lost, let it again return, and he will bless the means which restored it. None enjoy riches so much as those who have been at great pains to attain them: He who was

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always

370 INFLUENCE OF THE PASSIONS

always affluent, has no competent idea of Indigence, to contrast such a state, or exalt his enjoyment.

Were our exquisite pleasures too lasting, they would lay so much stress on the vital powers of the body as soon to wear it out. Every extreme therefore corrects itself, and every evil works its own cure.

If the violent Passions harrow up the Soul, and disturb its union with the body; a Conscience pure, and uncorrupted, the inestimable reward of Virtue, will best reconcile them to each other, and cause them to dwell in harmony: That will always speak peace to the Mind, whatever the world may say, and shield it from the impotent attacks of Slander and Abuse.

“ He that has light within his own clear breast
“ May sit i’ th’ Center, and enjoy bright day;
“ But he that hides a dark soul, and foul thoughts,
“ Benighted walks under the mid-day sun;
“ Himself is his own dungeon. MILTON.

Whoever is over solicitous about Censure, Fame, or the possession of temporal
En-

Enjoyments, will seldom find repose: An ungracious look from his superiors, or unmerited insolence from those below him, will vex and discompose him. If he is anxious for long life; a coffin or shroud, the apparatus of Death, will alarm and appal his Senses; whilst he who dispenses with such unavoidable Ills with a philosophic indifference, who is neither weary of living or afraid to die, will find within himself an inexpressible, and perpetual calm.

By giving way to Sorrow, or Anger, they at last become habitual and reign triumphant: In a word, the *Government of the Passions* is as essential towards preventing Diseases of the Mind, as *Temperance* contributes to hinder them from attacking the body.

That man ought to be deemed richest, who is the happiest; and he is the most likely to become so, who, with a virtuous resignation is prepared for the unavoidable Evils, which flesh is heir to; who expostulates with the folly, and extravagance of his own desires,

372 INFLUENCE OF THE PASSIONS

and though a hard task, at last convinces himself that what he likes best, is not always best for him; who preserves at all times, a decent equality of Mind; is not arrogantly elated with the delusive smiles of *Prosperity*, nor servily cast down by the furlly visage of *Misfortune*.

'Tis not my province, neither was it my design to moralize on the Passions, but only to regard such Reflections as appear most conducive to their regulation, the better to preserve, or restore Health.

The different Seasons of Spring, Summer, and Winter, have also a manifest Influence on the Body and Mind. The celebrated Poet *Milton* was a remarkable Instance of the truth of this assertion; for we are told that his Fancy made the most elevated flights in the Spring. His Imagination in several parts of his *Il Penseroso*, *L' Allegro*, and *Mask of Comus* are fraught with celestial fire; whilst in some other places, he scarcely comes up to cold Mediocrity.

Another

Another cause of morbid change in human bodies arises from the noxious qualities of Air peculiar to certain situations tending to produce Diseases called *endemial*, as *Agues*, and *Dropsies*; or such as only prevail with violence at particular seasons, namely, the *Influenza*, *malignant Fever* or *Plague*, which being infectious are therefore called *epidemical*.

It will not here be requisite to call in the assistance of *Physic* or *Philosophy* to prove the effects of different Climates, and alterations of the Weather on human bodies, especially in those of a delicate, infirm state.

The great difference experienced by our feelings, from the sudden changes of the atmosphere, even in the space of a single day, will more powerfully confirm the reality of such effects than all the reasoning in the world.

Popular Diseases, as well as bodily Habit, and natural Temperament in people of different Nations, all chiefly depend
on

on particular Situations ; together with the Soil, Air and Water peculiar to each.

We know that Transplantation changes both the shape, and quality of some *Vegetables*, and that particular *Animals* lose their native Temper when transported to other countries. The phlegmatic Disposition of a *Dutchman*, or half frozen, insensible Constitution of a *Laplander* might be thawed, and mellowed down into more pleasurable, and ardent feelings, by the warm, delightful Climates of *Italy*, or the south of *France*.

Influenced and animated by the Air, and manner of living prevailing among the Natives, he would, like them, delight in Mirth, in Music, and Society ; and from the same cause, an Englishman, at Paris, would perhaps be more than equal in vivacity to a Frenchman in London. Men should not therefore pertly presume on the superior excellence of their bodily, or mental Faculties ; for if they only consider how they came by them, they will have little to ascribe to their own merit ;
since

since they stand indebted to mere chance, for the greatest part of them.

Instead of this simple method of accounting for many Diseases, and applying Remedies suitable to their Cure; namely such as may be taken from the Regimen of *Air*, *Diet* and *Exercise*, assisted by *simple Medicines*; it has been too much the custom, to impute Diseases to occult qualities, or look at a great distance for their cause; as well as to ransack the East and West Indies for expensive Medicines, whilst Nature with a frugal hand has presented us with innumerable Vegetables equally salutary, growing in Gardens or the open Fields at home; whose Virtues are insufficiently attended to, and imperfectly known.

The *Sun* and *Moon* regarding their nearness, and direction to the Earth, likewise produce very considerable changes on animal bodies, by the mediation of the Air or Atmosphere, according to Dr. *Mead*, who has elegantly and professedly treated on their Influence.

Sir

376 INFLUENCE OF THE PASSIONS

Sir *Isaac Newton*, whose illustrious name will be revered, throughout the world, to the end of time, has clearly demonstrated how, by the united, and separate force of the *Sun* and *Moon* all the varieties of the Tides may be accounted for. The Waters of the Ocean, and Air of our Earth are fluids subject, in degree, to the same laws of motion; and if the Sea is agitated by the Influence of those Planets, so likewise will that ocean of Air surrounding the Earth be elevated to a considerable height by their attractions; especially, when they arrive at its *meridian*.

Agreeable to this observation, *Seamen*, *Shepherds*, and those whose interest is connected with changes of the Weather, and constantly reside in the open Air, observe that there is generally a breeze of Wind about *Mid-day* and *Mid-night*, although the Atmosphere before that time had been still and calm.

By this ebbing and flowing of the Sea, and Air; Winds and Tides are produced,
which

which agitate and preserve those fluids in their original purity, without which we could not exist a moment.

The changes of the Air at *New* and *Full Moon*, especially a little before the *Vernal*, or after the *Autumnal Equinoxes*, have considerable Influence on the health of all animal bodies. At this time, storms and tempests generally prevail; the Air is rendered too light, and being insufficient to blow up the Lungs, the blood cannot then pass freely through them; hence difficulty of breathing, and palpitation of the heart, attended with sleepiness and oppression.

Besides this cause of variation in the constitution, there is another equally prevalent, viz. a considerable quantity of Air is contained in our blood, which is expanded by *Heat*, and condensed by *Cold*. This Air will always preserve an equal ballance with that pressing on the surface of our bodies. In Summer the veins are large and

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378 INFLUENCE OF THE PASSIONS

tumid, in Winter small and contracted; and this can only happen by the contained Air in the blood, taking up a larger, or smaller space, according to the degree of heat existing in the body; for the quantity of blood, at both seasons, is precisely the same.

Farther to illustrate this matter from the bodily feelings; let those of weak Habits, and great nervous Sensibility, recollect how they have often been affected before a Thunder-Storm, when the *Air* is rarified and rendered preternaturally light, to an uncommon degree; and how immediately they find relief by the sudden Deluge of Rain generally falling soon after; which, by cooling, and condensing the Air, gives it sufficient weight to counteract and repress the internal Air, as well as more effectually to blow up the Lungs.

In this conflict of the Atmosphere, when the Air is over-heated, they are not only half suffocated, like Fishes out of water,
and

and brought from a heavy, into a lighter Element; but are sometimes seized with Head-achs, Vomitings, or Bleeding at the Nose, and universal Tremor, independent of Fear, from the *sudden Expansion of the Air in the Blood*, and the uncommon stress from thence laid on the vascular and nervous System.

Thus, Animals die in the exhausted Receiver of the Air-Pump, for two reasons; first, because they cannot exist when deprived of Air, the motion of their Lungs being then shut up; and next, because the Blood-vessels will be torn asunder by the expansion of the included Air, when the counter-pressure of the surrounding Air is taken away. In consequence of the same cause, a withered apple, placed in the exhausted Receiver, becomes plump and fresh like one just plucked from the tree.

It appears by experiments, that Animals in the exhausted Receiver of the Air-Pump, are sensibly relieved by *voiding Particles of Air*

from the surface of their bodies. In order, therefore, to restore that ballance between the external and internal Air, so essential to the well-being of such bodies; it is extremely probable, that there is a free communication between them; *viz.* When the external Air is light, a certain quantity of the internal Air escapes through the pores, lest it should burst the vessels, for want of sufficient counter-pressure from the outward Air; and, on the contrary, when the external Air suddenly becomes too heavy, part of it insinuates itself into the blood, to preserve a due ballance; lest the body by sustaining an uncommon outward pressure should be injured or destroyed.

This quality of discharging Air from *vegetable Bodies*, and absorbing it again, has been demonstrated by Dr. *Hales*; and I see no reason why it may not be so in Animals; for if it had not admission into, as well as out of the body, by its several pores; the
ballance

ballance between the external and internal Air could not so soon be restored.

In warm, damp weather, before rain, when the Mercury in the *Barometer* falls, those of delicate habits perceive an unpleasant sensation; the Body is indolent, and the Perceptions of the Mind less acute. The flesh is perceived to bloat and swell; they have Aches and Pains in different parts, Pinchings in the Bowels, and sometimes a *Diarrhæa*. They complain that the weather is dull, and the *Air heavy*; whereas it is just the contrary; for the Air having now lost its *natural Gravity*, produces a sense of weight and oppression in the body; so that we fall into an *Error*, by applying that to the Air, which is only the result of our own feelings.

Exercise is the best preservative against the Influence of the Weather; for by promoting a free distribution of the blood, and increasing perspiration, the bowels and internal parts are relieved from a load
of

of obstructed humours, which would otherwise be turned upon them.

The Relief perceived by an *Escape of Air* from the body, when its vessels are full and turgid, manifestly point out the advantage of the Cold Bath, low Diet, and a cooling Regimen, with the Use of the *Bark* and *Acids*; and also shew, why an increase of *Perspiration*, as well as all the natural Discharges, will at such times become beneficial.

The Air on the tops of very high mountains, being too thin and light, occasions difficulty of breathing, and sometimes the bursting of a blood-vessel in the Lungs, or weaker *Viscera*; especially when the violent efforts of the body in gaining those vast heights are superadded, and which so much increase the motion of the blood. This ought to be a caution to those, who in the eager pursuit of pleasure and fine prospects, might, otherwise, be forgetful of their safety.

In

In ascending that beautiful and immense Mountain, the *Wreken* in *Shropshire*, I was sorry to want a *Barometer*, by which more fully to ascertain this matter ; for the lightness or weight of the Air may be accurately determined by the falling or ascent of the Mercury in the Tube.

From what has been said, it follows, that when the natural Ballance between the external and internal Air is destroyed in the human body, many temporary changes must happen, according to the various alterations of the Weather, the Moisture or Dryness of the Atmosphere, and degrees of its Heat and Cold, which will create unpleasurable sensations, hardly to be described.

When the weather is intensely cold, the weight of the external Air pressing on the surface of the body may compress and overpower that within, and so repel the blood to the *Heart* and *Brain* as to occasion Sleepiness, Stupor, and Death, by a total Stagnation ;

384 INFLUENCE OF THE PASSIONS

tion ; as has frequently been observed in Climates uncommonly severe ; and more particularly where the elastic force of the internal Air is lessened by a scorbutic habit of Body, or other putrid Diseases. The reason why most people sleep better in the Country is partly owing to the freshness and greater Gravity of the Air, acting externally on the body.

Many curious instances might here be brought to shew the remarkable effects of *Lunar Influence* in Diseases of the Brain and Nerves. *Epileptic Fits* most frequently occur at *New* and *Full Moon* ; and Madmen are then more violently affected with frantic Ravings.

Periodical Head-Achs, as well as *Fluxes of Blood* from the Nose, Lungs, or other weak parts, also happen more uniformly at this time than any other, especially about the *Equinoxes*, when the Influence of this Planet is considerably increased ; or
where

where other accidental causes concur; as the Violence of the Passions, Summer Heats, the Use of Mercury, or immoderate Exercise; all which will lay an additional stress on the Blood-Vessels: Hence also the *Apoplexy*, or other violent Diseases, which probably might have been prevented by *Bleeding*, *Evacuations*, and a *cooling*, *spare Diet*, which abate the circulating power.

Dr. *Mead* mentions several patients, in whom the Epileptic Fit returned regularly at *New* and *Full Moon*; particularly, in a Girl, which afterwards kept its periods regularly with the *Tides*. Dr. *Pitcairn* also speaks of a violent Convulsion of the Arm returning periodically twice a Year, *viz.* in *March* and *September*, at the *Full Moon*, near the Vernal, and Autumnal Equinoxes.

The *Equinoxes* are particularly unfavourable to the unhealthy and consumptive: At this time, according to *Sanctorius*, the vital powers of the body are uncommonly languid,

386 INFLUENCE OF THE PASSIONS

guid, and all its natural Discharges suspended, especially that of *Perspiration*. Irregularities of the Passions, Errors in Diet, or other accidental causes, have therefore been observed to produce dangerous Diseases.

More people die in *March* and *October* than in any other two months during the year; and the principal reason of this extraordinary Mortality seems owing to the sudden Changes of Weather, from Cold to Heat, and *vice versa*. The Solids cannot without violence and pain, accommodate themselves to the quick transitions in the temperament of Air, from one extreme to another; so that as it is *hot*, and *moist*; *cold*, and *dry*, such will be the greater or less degree of strength in the body, and circulating power of the blood, upon which all its natural Functions principally depend.

At these unhealthy Seasons, when the Air is moist and light, and abounds with noxious Vapours; it will be proper to avoid

the Morning, and Evening Air ; the first is cold, and unfriendly ; the last is replete with falling Dew, which in some particular Mineral Soils, or near stagnating, putrid waters, is loaden with baneful qualities. At such times it will also be eligible for the weak and valetudinary, to retire from low, southern situations, for those more dry, and elevated, which are fann'd by northern or easterly Breezes ; the Air of the first enervates and deadens the bodily powers ; the last gives strength and vigour to the Constitution.

The Changes of Air, as to its *Gravity* and *Lightness*, and the degrees of *Heat* and *Cold*, *Moisture* and *Dryness*, may all best be known from those elegant and useful Instruments the *Barometer*, *Thermometer*, and *Hygrometer* ; from which many useful indications may be taken, relative to the preservation of Health.

Other Planets of the first magnitude, as well as the *Sun* and *Moon*, influence the

388 INFLUENCE OF THE PASSIONS

human body ; not in any supernatural or incomprehensible manner, but solely by means of our Atmosphere, conformable to the stated and universal Law of Nature.

F. Hoffman, who regularly kept a *Journal of the Weather* for ten years ; and whose Integrity was equal to his Medical Knowledge, solemnly asserts, that very great and remarkable changes of the Air were brought about by the appearance of the larger Planets ; from which, as well as the whole of what has preceded, I would make the following Deduction, *viz.* That the *Planets* influence the Atmosphere, which in its turn produces a manifest change in the human body ; that the body, by sympathy, communicates similar changes to the Mind ; and that the Mind is the principal Agent which governs and directs the moral Conduct of men, upon which their Prosperity or Adversity, in a great measure, depend.

In

In this frail and uncertain state, the human System is subject to an *inclement Atmosphere* without, and the *violent Passions* within; it may suffer from *Intemperance in Diet*, the *Advances of Age*, and the prevalence of *injurious Habits*, so as to render it more unstable than the *Weather Glass*, and in a perpetual state of Change, from the Cradle to the Grave.

Well may human Life, thus surrounded by a train of unavoidable dangers, and calamities, be compared to a *fleeting Shadow* which never continues in one stay: Like an unballasted Bark in a troubled Ocean, it becomes the sport of winds, and tides; and without the Aid of *Religion, Reason, and Philosophy*, is in continual danger of being swallowed up and lost!

I cannot better conclude this Section on the Influence of the Passions, and the Instability of human Life, than in the words of that Divine, and Ever-living Bard, *Shakespeare,*

390 INFLUENCE OF THE PASSIONS

Speare, who thus holds up the Mirrour to
the Face of Nature.

- “ Reason thus with Life ;
- “ If I do lose thee, I lose a thing
- “ That none but fools would keep ; a breath thou art,
- “ Servile to all the *skyey Influences* ;
- “ That do this habitation, where thou keep’st,
- “ Hourly afflict ; merely, thou art Death’s fool ;
- “ For him thou labour’st by thy flight to shun,
- “ And yet run’st tow’rd him still. Thou art not noble ;
- “ For all th’ accommodations that thou bear’st
- “ Are nurs’d by baseness. Thou’rt by no means valiant ;
- “ For thou dost fear the soft and tender fork
- “ Of a poor worm. Thy best of rest is Sleep,
- “ And that thou oft provok’st, yet grossly fear’st
- “ Thy Death, which is no more. Thou’rt not thyself ;
- “ For thou exist’st on many a thousand grains,
- “ That issue out of dust. Happy thou art not ;
- “ For what thou hast not, still thou striv’st to get ;
- “ And what thou hast, forgettest. Thou art not certain ;
- “ For thy Complexion *shifts to strange effects*,
- “ *After the Moon*. If thou art rich, thou’rt poor ;
- “ For, like an Ass, whose back with Ingots bows,
- “ Thou bear’st thy heavy Riches but a journey,
- “ And Death unloads thee. Friend thou hast none,
- “ For

“ For thine own bowels, which do call thee Sire,
“ The mere effusion of thy proper loins,
“ Do curse the *Gout*, *Serpigo*, and the *Rheum*,
“ For ending thee no sooner. Thou hast not youth, nor age,
“ But as it were an after-dinner’s sleep,
“ Dreaming on both ; for all thy blessed youth
“ Becomes as aged, and doth beg the Alms
“ Of palsied Eld ; and when thou’rt old and rich,
“ Thou’st neither heat, affection, limb, nor beauty,
“ To make thy Riches pleasant !

SECTION

S E C T I O N XV.

*The Salutary Power of Air, Diet, Exercise,
and Simple Medicines, in the Prevention,
and Cure of Chronic Diseases.*

WE shall now proceed more particularly to consider the nature and qualities of *Air, Diet* and *Exercise*, as well as their salutary effects in the Prevention and Cure of *Chronic Diseases*; especially when assisted by mild and *Simple Medicines*.

Fresh, and *Pure Air* is even more essential to life, than food daily taken into the body for its subsistence; for animals will live a long time without nourishment, but when depriv'd of Air, they perish in a few moments.

It is not necessary, to enter minutely into a disquisition of all the Properties of Air: Its Springiness or Elasticity, Weight or Gravity; its Compressibility, and Power to expand,

pand, have all been accurately described by Natural Philosophers, and satisfactorily demonstrated on the *Air-Pump* and *Barometer*.

This Element is always found to partake of the nature of *Soil* and *Water*; and is more or less healthy according to the situation of particular places. The human constitution will therefore be variously affected by its qualities, whether good or bad; for it is not only continually taken into the Lungs by breathing, and largely mixed with our Food, so as to make a part of the animal System, but also is continually pressing on the surface of our bodies, according to its different degrees of lightness, and gravity.

The Steam proceeding from fresh, pure Earth turned up by the plough or spade, has been found extremely refreshing to those of weak lungs, and consumptive habits; and on the contrary, mineral Exhalations in some parts of *Devonshire*, and other places where Mines abound, have been observed to blight the contiguous grass, and vegetables; and

consequently must be highly noxious to animal bodies.

Of all metallic substances, that we know, *Iron* seems the least injurious to *vegetable*, or *animal Bodies*; for it enters largely into the composition of the first, and the last contain a small quantity of it, as appears by the attraction of the load-stone, when applied to their ashes.

Some Liquors can only be brewed in perfection in particular places; which local peculiarity equally contributes to the production of bright and vivid colours, in the art of *Dying*; and even the high temper of Steel derives much of its excellence from the nature, and qualities of *Air*, and *Water* peculiar to certain places.

It is not less extraordinary, that liquors in a state of fermentation, are immediately turned sour, from the sulphureous effluvia with which the Air is impregnated by *Lightning*; and if such are the effects of Air on fluids in general, we need not wonder

der that, by altering the nature of our blood and juices, they should either become the *Cause, or Cure of Diseases.*

By *pure Air* is meant, that perfectly free from the noxious effluvia of *Metals*, and the corrupted steams of *vegetable* or *animal* Bodies; and that which is neither too *hot* or *cold*, *moist* or *dry*, may properly be called a *temperate Air*. The immense body of this element, by the alternate effect of heat and cold, is expanded and condensed, so as to keep it in continual agitation, by which its purity is providentially preserved. Hence the great unwholsomeness of a sudden calm, when the Air is *hot* and *moist*; also of heavy rains, after long droughts, as those called *Monsoons*; and even of a sudden thaw, after severe frosts; for then, bad Colds, sore Throats, Fluxes of the Belly, and Diseases of the putrid or malignant kind are known to prevail with great violence.

In the last Section, and in treating on Consumptions, I have remarked that the

Air of particular places has a pernicious effect on animal bodies; and on the contrary, it cannot be doubted, but that which is *temperate* and *pure*, must contribute to the Preservation, and Recovery of Health.

The qualities of *Dew*, which is nothing but water impregnated with such *animal*, *mineral*, or *vegetable* substances as arise in Vapor from the earth, afford the best means of ascertaining the *local Purity of Air*, and *Water*; joined to the customary *Longevity* of the Inhabitants in such places.

This is a circumstance of the utmost importance to those who propose to raise Buildings, where they mean to reside, which however magnificent, will afford but little satisfaction or enjoyment, if Health, the principle source of happiness is taken away.

Rich Soils lying low, near marshy banks of Lakes, or large Rivers, exposed to the Sun's heat, or south-west winds, are extremely unwholesome; the Air of such places

places being damp, and loaded with the corrupted steams of animal and vegetable bodies, which there rot, and are dissipated in putrid Vapor. Such situations will dispose the body to a lax, bloated, scorbutic habit; also to nervous Disorders, Agues, a Dropsy, Consumption, and putrid Fevers. As *Milk* is soon turn'd sour, and vegetable Infusions presently become stale and musty, by being exposed to a warm, impure Air; so the animal fluids may be corrupted from the same cause.

Thus the Air replete with the stench of dead Whales, and swarms of Locusts, or human Bodies remaining long unburied on the field of battle, have been known to produce the *Pestilence*; which shews the necessity of excluding all *Burial Grounds* from great Cities, where the dead would become offensive to the living. The over-flowing of the *Nile*, succeeded by hot weather, and southerly Winds, generally brings the *Plague*. The Air of *Rome*, *Piso*, and *Amsterdam* are extremely

extremely unhealthy at particular seasons ; and the sickness, or health in the Inhabitants of *Egypt* keep regular periods with the winds.

The best *Preservatives* against putrid Diseases of every kind, are the *Peruvian Bark* and *Acids*, with a *Vegetable Diet* ; taking care at the same time to promote the Secretions of Perspiration, Urine, and Stool. A decoction of black Tamarinds with Cream of Tartar, may frequently be taken to keep the body laxative ; and to promote Urine, or Perspiration, nothing will exceed the effects of *Nitre*, and *Mindererus's Spirit*, the last of which is a composition of volatile alkaline Salt, and vegetable Acid. On such occasions, *Old Hock*, *Rhenish Wine*, or *Madeira*, are preferable to all others.

Elevated situations in a chalky or gravelly soil, open to the east, or north Winds, and near the rocky banks of pure, running streams, however severe the Air
may

may be, are by far the most healthy; for the Inhabitants of the *High-lands* in northern climates, are observed to be more alert and strong, than those residing in *Val-
lies*, where the Air is moist and mild: In the first it braces and invigorates the body; in the last, relaxes and deadens its vital power.

For the same reason, Heaths, and open Commons overspread with sweet smelling shrubs, where the Air is fresh, and dry, are generally found to be healthy; but in wood-land Inclosures, where it is damp, and confined, complaints of the Bowels, Rheumatisms, Agues and Dropfies are frequent Disorders.

Air has a dissolving power upon Water, which is considerably increased by *Heat*; and this is the reason why south or western Breezes, which blow over those immense tracts of water, the *Mediterranean*, and *At-
lantic Oceans*, are replete with moisture; and consequently relax and weaken the body.

Moisture,

Moisture, or *Water*, thus combined with *hot Air* is rendered visible, when condensed into drops on the surface of bed-chamber windows, by the sudden accession of the external cold; and Fogs are nothing but water decomposed or separated from the *Air* which had dissolved it.

As *Vegetables* cannot grow *without Air*; so neither can *Fermentation* go on, or the Process of hatching eggs, and kindling up the sparks of *animal Life*, be compleated without it. I have elsewhere observed*, that living Creatures cannot long survive, or *Flame* subsist, without a constant supply of fresh *Air*, which therefore, may properly be said to contain an *enlivening Spirit*.

If, for instance, a lighted *Wax Taper* is put under a Bell-Glass so closely fixed as totally to exclude the outward *Air*, the flame will continue a longer or shorter time according to the size of the Glass; that is, in proportion to the quantity of *Air* contain-

* *Practical Observations*, 3d. Edit. 153.

ed in it; and it may be observed gradually to burn more languidly as the vivifying spirit of the Air is destroyed or exhausted; at which time the flame is totally extinguished, altho' the Taper is not burnt out.

Just so this *Element* contributes to feed the *Lamp of Life*; and when its natural qualities are destroyed by the breath, and perspirable matter continually proceeding from a number of animal bodies, it becomes highly pernicious, and destructive to health. Hence may be seen the necessity of avoiding a warm, moist, confined Air; the great advantage of sleeping in lofty, open, bed-chambers, daily ventilated by fresh Breezes, and of chusing healthy situations for our place of constant residence.

By DIET is meant the Food or Meat and Drink taken into the stomach for Nourishment; which being digested, and rendered *chylous*, at last enters into the composition of our flesh and blood: They may therefore be considered as the very *Elements*

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which

which constitute the substance of animal bodies. Hence, many changes from Sickness to Health, may gradually be brought about by *Food of different qualities*, adapted to the nature of particular Diseases, which could not so easily be effected from medicinal substances; for, the first is constantly received into the body in large quantities, but the last are only given by grains, or scruples, for a few weeks or days.

Such a salutary change may the rather be expected, because, many substances are found to retain their natural qualities, in a considerable degree, after being digested and transmitted into the blood. Thus *Turpentine*, and *Asparagus* will affect the smell of Urine; *Madder Root* constantly taken with Food will *tinge the Bones red*; and *Meadow Garlic*, or *Elder Leaves*, on which Cattle have accidentally fed, will communicate to their Milk, a strong, disagreeable Flavour.

Both

Both *Animal*, and *Vegetable Bodies* originate from slender beginnings: The bulk superadded to the body of an Infant, 'till it advances to the utmost period of growth, at maturity, is all derived from the nourishment of its Meat and Drink; and the *Acorn* unfolds its Stamina, and gradually becomes an *Oak* by juices borrowed from the Earth.

In what manner *Aliment* becomes *Chyle*, is ripened into blood, and converted into bodily substance, has been fully shewn in treating of Digestion, page 179; but how nutritious matter, which before was senseless, and inert, at last becomes transubstantiated, and endowed with *intellectual Feeling* in the Brain, and nervous Substance; how that feeling is so diversified in different Senses of the body, as by means of the same organ, *viz.* the Nerves, to see in the *Eye*, hear in the *Ear*, and taste in the *Tongue*, is rather matter of astonishment than investigation.

In the cure of Diseases, *Pythagoras* preferred Regimen in Diet, chiefly of the *Vegetable Kind*, to the use of Medicines; and determined the choice of its nature, and quantity by the nicest rules of Temperance. *Asclepiades*, the famous Bythynian Physician, also founded his practice on Diet, and Exercise; and we find that *Dietetic*, and *Gymnastic* Institutions so much prevailed among the Ancients, that they cured many Diseases, especially of the *Chronic kind*, with little assistance from Medicines, except those of the simplest kind.

The *Regimen of Diet*, as to quantity and quality, should not only be adapted to particular Ages, and Constitutions; but also to the nature of Climates, and degree of the Patient's Exercise. When the quantity is too great, the vessels will be over-loaded, and the body oppressed; if too small, it will waste and decline in strength.

In a word, whatever destroys the due balance between the Solids and Fluids, will
produce

produce Sickness, and Diseases; so that either very high or low living may injure the Health; but of the two Extremes, the first is infinitely most common, and productive of greater danger; since the several Instances of *Longevity* are chiefly to be found among those who live on *spare*, and *simple Diet*; of habits naturally thin, and fair complexions.

On the other hand; those men who live intemperately, and fill their vessels 'till they are ready to burst, frequently die before their time, of Apoplexies, or other violent diseases; whilst their half-surviving companions, the next in rank, and expecting to fall in their turn, like true Philosophers of the Bottle, cry out with resignation, So it pleas'd God! It is difficult to know whether the expression is more stupid or impious; they might with more propriety say, so it pleas'd their fordid, and gluttonous appetites. The good Effects of Temperance is acknowledged by all, but duly attended to by few.

He

He who means to be a *rational Epicure*, and to exalt the pleasure of Eating beyond the reach of a Sensualist, must eat with great *simplicity*, and *moderation*; for then only he *will taste with his natural appetite*, and give to the stomach no more than it can dispense with consistent with his Health. If rich sauces, and very high season'd dishes are grateful to some, they do not possess the genuine palate of nature, but one which is depraved; for children, and young people disrelish all such aliment, and never grow fond of it 'till their taste is vitiated by habit, and bad example.

Thus when the Food and Palate are both in their natural state, the relish is high, and the body duly nourished; but when by the arts of compound cookery, the first is deprived of its soft, balmy quality, and rendered almost *caustic* by salt, cayen-pepper, and other high seasoning, it stimulates the languid appetite, heats the blood, and wears out the bodily fabric. Whereas, those who
abstain

abstain from Wine, Spirituous Liquors, or hot spicy Aliment, acquire an exquisite degree of delicacy in the Sense of Tasting, and in general are longer lived.

If the Qualities and Taste which things naturally possess are right ; those communicated to them by the too officious hand of art must surely be wrong. The cool, refreshing *Melon*, a native of scorching Climates, intended to quench thirst and allay heat, is often robbed of its genuine properties by a profusion of pepper ; and the *Acid Fruits*, which from that quality, would strengthen the Stomach, and resist the prevailing, autumnal putrefaction, are lost in the taste of Sugar.

Thus the beneficent simplicity of Nature is superseded and set aside, to make way for customs which luxury has introduced ; for it must be confessed, that in the affairs of human life, many are more guided by the example of others, than by reason, an unprejudiced understanding, or the nature

ture of things; and there is nothing so ludicrously absurd that will not derive sanction from custom, and the prevailing fashion of the times.

In fixing a standard for *Temperance*, our own feelings, or even the custom of the place would be very insufficient guides: We should rather observe, in what degree of vigor and perfection animal life is supported among the poor, who live on the most simple fare, and in a manner conformable to nature.

If many of the *Irish*, with *milk* and *potatoes*, enjoy perfect Health, and exercise all the faculties of body and mind; if the *Persians*, who were a brave and warlike people, subsisted chiefly on *Bread* and *Cresses*; and whole nations, who seldom eat Flesh, but only *Rice* and *Fruits*, live long and healthy; we might certainly, in this country, subtract a little from our *full, animal Diet*, with great advantage to the Constitution.

When

When imaginary wants are discarded, real ones will soon be supplied. We should endeavour to distinguish between the instinctive calls of Nature, and artificial cravings of a depraved Appetite. A whimsical palate is a troublesome companion, and often makes much larger demands than is its due. If the Stomach refuses its natural food, it ought to do penance, and be starved into compliance; for whatever is eaten, that goes against it, can neither be digested, or converted into nourishment, and therefore is no better than poison.

General Rules concerning *Diet* must always have their particular exceptions, according to the different constitutions for which they are directed. *Vegetable Food* is less nourishing and more flatulent than that of the *animal kind*; but it resists putrefaction, and is most proper for those of strong, bilious habits.

How far the Constitution may be changed by a Vegetable Diet, is evident in those who

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have

been cured of *inveterate Scurvies* by the plentiful use of *fresh Vegetables*, and *pure Water*; and instances are not wanting, where even the irascible passions have been, in a great measure, subdued by the same means.

Aretæus mentions the cure of a *Leprosy*, by total abstinence from animal Food, and the constant use of Vegetables, in those afflicted with that loathsome disease; and who, from fear of infection, had been abandoned by society, and driven out into deserts and mountains.

Pure Water, another *simple Medicine* of sovereign efficacy, is that elemental fluid designed by Nature for the nourishment of all bodies, whether *Animal*, or *Vegetable*; it softens and dissolves the food in the Stomach, attemperates corrupted Bile, dissolves the sharp Salts, and rancid Oils, and washes them out of the body by the secretion of urine. How superior is this inestimable Liquor, gushing from the pure bosom of a Rock, as from the Cellar of Nature, to
all

all the artificial compounds which Luxury, or human Invention can devise?

The sickly Stomach often thirsts after a draught of the bubbling Spring, as the greatest Cordial, whilst it nauseates the richest Wines, and every thing besides. Indeed, Wine, Beer, and all other made liquors, are only Water sophisticated with different proportions of Oil, Salts, and Sulphurs; and so altered by *Fermentation* as to set their spirit at liberty; which then taken into the body produces a *narcotic Effect* on the Nerves, and occasions Intoxication.

I am far from supposing that such Liquors can never be beneficial: All I would infer is, that they are often prejudicial by abuse, that they only become necessary from custom, that they ought to be used with great moderation, and rather as *Cordials* than *common Drinks*.

That Water is best which is perfectly clear, insipid, light, and which will instantly lather

with soap: However its clearness is not so certain a test of its goodness, as its lightness; for the petrifying spring at Knaßborough, loaded with stony particles, is extremely limpid. *Distill'd Water*, or that which has passed a *filtering stone* is purest; and its lightness may be determined by the *Hydrometer*.

Water-Drinkers, and those who chiefly live on *Vegetables*, are observed to be more healthy, and long-liv'd than others: In such, the faculties of the body and mind are more strong; their Teeth more white, their Breath is more sweet, and their Eye-sight more perfect, than in those who take fermented Liquors, and much animal Food. They are much less subject to the *Gout*, *Gravel*, *Colic*, and *Scurvy*; to *Hysterics* and *Apoplexy*, and acute Diseases in general.

Quadrupeds, living on flesh, are fierce in their nature, and the exhalation from their bodies is putrid and offensive; whereas Cows, Sheep, and other Animals, which
feed

feed on herbage are much more gentle; their breath is sweet, and their excrement almost inodorous.

From what has preceded it appears, that *much animal Food* is unwholesome; especially to those of *bilious habits*, in warm, moist weather; it will load the body with *rancid Oils*, spoil the sweetness of breath, render the several discharges more offensive, and dispose it to Diseases of the putrid kind; which may best be prevented, or cured by a vegetable, acescent Diet; a total abstinence from fermented Liquors, and the liberal use of *pure Water*, with fresh orange, or lemon Juice.

Ripe Fruits, infusions of the inner bark of the Elder Tree, green Pine tops, and Dandelion Root, are all *simple Medicines* of the powerful kind: They abound with a vegetable dissolving Soap, and will be highly beneficial to those of gross habits, inclined to the Scurvy, Dropsy, or Diseases of the Liver.

Bentikoe,

414 AIR, DIET, AND EXERCISE, &c.

Bentikoe, near a century ago, bestowed the most extravagant encomiums on the use of *Tea*; but like a true medical Enthusiast, erred in the extreme; since daily experience shews it to be pernicious to people of *lax Solids*, and *weak Nerves*; those, who of all others generally use it most immoderately. The internal flutter which it often occasions, especially *Green Tea*, and its remarkable effect in *preventing Sleep*, shew that it makes some peculiar impression on the Nerves. However, used in moderation, with a large addition of milk, I believe it will seldom do harm.

Sugar is not so pernicious as some have imagined. It may be obtained from *Vegetable Juices*, as well as *animal Fluids*: It abounds in the Skirret, Red Beet-Root, and other plants; and fresh new Milk Whey, in Summer, affords a considerable quantity of it, according to *Hoffman*.

Vinegar, than which a more sovereign, *simple Medicine* is not to be found; but being

ing cheap, and at every one's service, it is often disregarded, to make way for things of higher price, and inferior efficacy. Moderately taken, it assists Digestion, cures the Head-ache, strengthens the Nerves, and powerfully resists putrefaction.

Every Animal is surrounded with its own atmosphere; consequently, the cleaner such bodies are kept, the more pure and wholesome will be that *Air* which is constantly taken into their Lungs; a circumstance of more moment to health than is generally imagined; for *putrid Fevers*, and *Fail Distempers*, equal in malignity with the Plague itself, are occasioned by nastiness, and corrupt Air.

Nothing can be more grateful and refreshing to the Stomach in the morning, than a glass of pure, cold, spring-water, after washing the mouth; it cools, and attemperates the blood, and resists that *putrid tendency* which prevails after rest, and long fasting. *Platnerus* wrote an incomparable
Treatise

416 AIR, DIET, AND EXERCISE, &c.

Treatise on the diseases proceeding from want of cleanliness; and I would wish it to be remarked, that nothing ought to be considered as trifling that has a manifest tendency to preserve Health.

Early Rising, particularly in summer, also contributes greatly to health, pleasure, and convenience; for in the morning, the body is more active, and the faculties of the mind more distinct and clear. We might here add, that going soon to bed has likewise its peculiar advantages, notwithstanding the Joys of twelve o'clock; even Plants themselves have a kind of unconscious repose; which did not escape the attention of that *Immortal Poet*, whose comprehensive soul was familiar with all Nature, who peep'd into the bottom of a Cowslip, for the "cinque-spotted crimson drops;" and saw the "winking Mary-buds begin to ope their golden eyes" at the glorious Sun's approach.

The

THEIR SALUTARY POWER, &c. 417

The *over-lax* or *tense* state of the Solids, as well as a depravity of Blood, are productive of many Diseases, all which may be relieved by the power of *Diet*, and *Exercise*. Abstinence, or Rest relax the solids, and dissolve the blood; and pure water, with *Nitre*, contributes to the same end. Agreeable to this observation, the blood of labouring-people, who have strong solids, is rich, thick and florid; whilst that of the weak and sedentary, is pale, crude, and watery: So that many Diseases supposed to proceed from over-thickness of blood, arise from a different cause. On the contrary; Exercise, dry Air, the Peruvian Bark, Steel, and Cold Bath will brace up the fibres, and enrich the blood.

Much *Salt* taken with the food is extremely hurtful, for it communicates to the blood a *briny Acrimony*, destroys the taste, hardens the fibres, produces the scurvy, and hastens old age. Plentiful dilution with

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soft,

soft, pure water is an effectual remedy for such complaints.

A fresh supply of solid food, before the last meal is perfectly digested and turned into blood, is highly pernicious; but as I have remarked the injuries arising from *long fasting*, at page 186; a glass of spring-water, or a dish of tea may be proper to dissolve, and assist the stomach in getting rid of its remains.

If the patient after eating is oppressed at stomach, sleepy, affected with internal throbbing, and flushings in the face; in a word, if the body and mind are much less vigorous and fit for action than before, he has then exceeded the proper quantity of food. How far its qualities are of consequence to Health, may evidently be seen in the most striking of all calamities, *viz.* a *Famine* being generally followed by the *Plague*, from the great scarcity of wholesome food.

By EXERCISE is meant that general, voluntary action of the muscles which puts the
body

body in motion, as well as that passive agitation in a carriage, or on horseback, where it does not properly move itself, but is moved by something else: The first is always preferable to the last, where the strength is sufficient to allow it.

It has been remarked in the Section on Nervous Disorders, that by the propelling force of the heart, the stream of blood is driven through its several pipes and strainers; but this great instrument of circulation, tho' admirably adapted for that purpose, is not sufficient to keep up the circulation in the smallest order of vessels, without the contractive power of the Muscles by *Exercise*: In what manner it contributes to that end may be demonstrated, by the simple experiment of squeezing a lancet-case or any solid body in the hand, after opening a vein, where the blood passes too slowly from the orifice; for when the muscles are contracted, it instantly spouts out in a full stream.

Herodicus, the master of *Hippocrates*, who is said to have recovered himself by the power of Exercise, was the Inventor of the *Gymnastic Art*, as the means of *Preserving*, or *Restoring Health*. If this ancient Physician urged his practice to a faulty extreme, by thus attempting, too indiscriminately, to cure all Diseases; surely many of the Moderns are as much to blame, in expecting to remove them without it; particularly those of the *chronic Kind*, which generally arise from a weakness, or some fault in the solids, to which the salutary power of Exercise is immediately applied.

Exercise or bodily motion, increases *animal Heat* by the same law of Nature that the Electric Globe, in whirling round, collects *Fire*; hence it renders the blood more fluid, and promotes its free and equal distribution thro' the whole vascular System. Many diseases therefore, proceeding from weakness and a defect of circulation, or cold cause, may, by Exercise alone, be effectually

fectually relieved; such as *nervous* and *hysterical Disorders*, *Agues*, a *Dropfy*, *Rheumatism*, and *Palsy*.

In a word, Motion is the very soul of Nature; for whenever animal, or vegetable bodies, or even the Elements of *Water* and *Air* remain too long at rest, they depart from their original qualities; the first tend to dissolution and decay, and the last become putrid and highly noxious.

All *animal Heat* seems to proceed from motion, but all motion does not perceptibly produce heat, otherwise, water running through pipes or conduits would acquire heat as well as the circulating blood.

Every fibre of a living body is endow'd with an *obscure vibratory motion*, which permanently exists throughout the whole system, even when it is apparently at rest: From the exertion of *this living Principle*, increased or put into additional motion by Exercise; *atmosphpherical Fire* is actually collected

lected in the living body, in quantity proportionate to the degree of its motion.

Although this may at first appear a very extraordinary position, nothing is more obvious and experimentally true; since motion generates heat somewhat in the same manner, even in inanimate bodies, for iron may be hammered till it becomes hot, and the simple attrition, or rubbing of one body against another, produces a similar effect.

The diffusion of *atmospherical Fire*, which in a certain quantity, pervades, actuates, and gives life and motion to the parts of matter in general, seems to have been wisely opposed by the Author of Nature, to the universal law of *Attraction*, which tends to concentrate, and bring them together. Hence by alternate *Attraction* and *Repulsion*, the motion of the whole material system is uniformly supported. Without Fire, Water would become Ice; Vegetation would be destroyed, and even the Blood of animals would be converted into a solid Mass.

From

THEIR SALUTARY POWER, &c. 423

From what has preceded, it will follow that too much or too little Fire thus collected in the human constitution must be equally injurious to health. Those, for example, who are young, have strong *elastic Fibres*, and use *violent Exercise*, will be in danger of sudden fluxes of blood from the nose or lungs, as well as of pleurifies and other inflammatory disorders; and on the contrary, those of a cold, *phlegmatic constitution*, and inactive life, will be subject to *Agues*, *Dropsey*, and *Rheumatism*, a *venous Pletbora*, or over-fulness of the veins, producing swellings, and ulceration of the legs, and the bleeding piles.

As the animal juices are accumulated by nourishment, and rest; and consumed by abstinence, and motion; it is a circumstance of the highest importance to health, to proportion them duly to each other, that the natural ballance may be kept up between the solids and fluids.

Moderate

Moderate Exercise is one of the most sovereign Remedies of which we are possessed, either in preserving, or restoring Health: It increases the natural heat of body, warms the heart, invigorates its motion, and promotes an equal distribution of blood to all its parts; in consequence of which they will be more duly, and effectually supplied with nourishment: It assists the Secretions of *Perspiration, Urine, and Stool*; strengthens Appetite and Digestion, renders the body less liable to the influence of severe weather, or to contract putrid Diseases; in short, it animates every part of the human system, and also gives alacrity and vigor to the mind.

The salutary power of *Exercise*, and good *Air*, is particularly remarkable in poor, hard-working, country people, who, notwithstanding their indifferent food, are generally hearty and strong. They have a much better appetite, and digestion than the *rich* and *indolent*: By the increase of
heat

heat consequent of *Exercise*, the oily and watery parts of their food, such as it is, will be more uniformly mixed, and worked up into a proper degree of richness, and consistence, so as more effectually to nourish the body.

Exercise, by walking in a dry, fresh air, is remarkably beneficial to those of weak solids, and a pale, watery blood; for it perceptibly increases their strength, and renders the face more *florid*: From this local alteration of the countenance, we may conclude, the effect is general; and that the blood being rendered more fluid, by an additional degree of vital heat, is now capable of circulating through vessels of the extremest fineness, which were impervious to it before; and upon those simple principles it may clearly be seen, why *Exercise* will always be found the most sovereign Remedy in all *Chronic Diseases* proceeding from lax fibres, and a cold cause.

I have remarked elsewhere, that *Riding on Horse-back* is extremely beneficial to the

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consumptive;

consumptive; and that Friction on the legs, arms and belly, with hot flannels, twice a-day, is of the utmost service to weakly people, because it generates heat, and dissolves the stagnating fluids.

Swinging is productive of the like benefit; for the resistance of the *Air* to bodies swiftly moving through it, is very great. Hence it is manifest, that *atmosphpherical Fire* will be collected by such *Exercise*, and that its quantity will always be in proportion to the velocity with which the body is driven through the *Air*. If this was not the case, bodies thus violently impelled through the cold atmosphere would be almost chill'd to death; whereas, on the contrary, they find themselves much warmer than before.

How different is Sleep after *Exercise*, from that produced by the effects of Liquor, or a full Stomach? The first is tranquil and refreshing; the last disturbed with Dreams, Suffocation, or Night-mare; and heat suddenly obtained from a large fire,
does

does not occasion that pleasurable, and permanent glow, as when gradually acquired by *bodily motion*.

We find that the limbs grow larger and stronger in proportion as they are exercised; and the excessive strength which may be gradually acquired by constantly putting particular Muscles of the body in motion, is exemplified in Tumblers, and Rope-dancers; or in those who by daily increasing a weight to be lifted from the ground, have far exceeded the efforts of others, and by such gradual means, have been enabled to raise it when incredibly heavy.

In short, if an indolent and inactive life manifestly weakens and enervates the body, it will be less wonder that *Exercise* should restore it to strength and vigor. *Activity* is the parent of hope and fortitude; but *Indolence* begets timidity and despair; for there is this difference between inanimate Machines, and those of living Bodies, that the first are always worse for wear; but the last,

by Motion and Exercise, will hold out the longer.

In those indeed, of lean, dry habits, who live abstemiously, and are far advanced in years, it is not so necessary, or beneficial; because it increases that rigidity of the fibres which then too much prevails, and consumes the bodily moisture which old people, from the dissipation of their blood and juices, are unable to spare.

We have now seen how *Intemperance*, and *Irregularity of the Passions* may wear out the body. In such as supinely submit to their power, *the sun will go down at noon*; whilst the Votary to *Temperance* will probably arrive at old Age, without Diseases, or Pain: Tho' he was born to die, the bond of union between the soul and body will rather be unloosed, than forcibly torn asunder. When his radical moisture is exhausted and gone, as in a lamp deprived of oil, the vital flame will languish, and at last must needs be extinguish'd!

Thus

Thus the state of the *Body* and *Mind* have been represented as they really are, not as we might wish to find them. We have endeavoured to shew their *mutual Influence*, and how they co-operate with each other; what particular condition fits them for Health, or tends to introduce Diseases; how they are alter'd by the effect of age; subject to the internal control of turbulent Passions; outwardly exposed to the malignant Influence of Weather, and insensibly perverted by the prevalence of pernicious Habits.

If such are their various Affections, and if our *manner of living*, changes our *manner of thinking*, so as to influence our Moral Conduct; thrice happy they who have been accustomed to *early Temperance*, and the due *Regulation of their Passions*, as the Basis of rational Enjoyment, and Source of human Virtue.

T H E E N D.

S U P P L E M E N T.

Necessary Instructions for those who consult a Physician by Letter.

TISSOT, at the conclusion of his *Advice to the People*, remarks that the Success of Medicines in a great measure depends upon a very exact, previous knowlege of the Disease for which they are administered; he therefore has set down *several questions* to be answered by those Patients who may find it necessary to consult a Physician by Letter.

Considering the vague, and imperfect manner in which some people endeavour to make known their Complaints; their tedious recital of many uninteresting circumstances, and the omission of others necessary to be known; such Instructions appear to have been highly requisite. I have, for this reason, after his example, here subjoined such particulars as are proper to be mentioned by Patients
in

in stating their cases, which will render them sufficiently clear and intelligible, viz.

What is the Patient's Age, Habit of body, and Manner of living?

How long has she been ill; from what apparent cause was her Disorder brought on, and what was the manner of its first attack?

Is the periodical Discharge regular; is she pregnant; or has she ever had Children?

Are her Complaints attended with Pain, Thirst, or Fever; and is her Strength much exhausted?

Are the Patient's Complaints constantly the same, or if otherwise, at what particular times do they generally grow worse?

Has she Pain and Giddiness in her Head, oppression at Stomach, or difficulty of Breathing?

Is she affected with Sickness and Vomitings, or a nauseous, bitter taste in her Mouth?

What

What is the natural State of her Bowels, as to being costive, or laxative?

Is the Urinary Discharge deficient in quantity, and Perspiration obstructed; is she restless, or does she enjoy refreshing sleep?

What is the Place of the Patient's Residence, and State of the Air; is it cold, and dry, or warm and moist? What *Medicines* has she taken, how long, and what was their effect?

Simple Forms of Medicine referred to in the preceding Work.

THE Medicines here set down, being composed of few Ingredients, may be had of the *Apothecary*, nearly at the same expence as if the articles were bought separately, and prepared by the Patient; such *Forms* being chiefly added to ascertain the *Quantity* and *Quality* of Medicines peculiarly adapted to those *Female Disorders*, which have been previously treated of.

When

FORMS OF MEDICINE. 433

When Medicines are disposed of at an under value, they cannot be supposed good; those who are desirous to recover their Health, and expect them *genuine*, should therefore, pay no regard to their price.

Note, To avoid confusion; the number of the different Medicines here referred to, has been regularly continued; and wherever any Medicine is omitted at its particular figure, there is always a Reference to another number, where the same Medicine had previously been set down.

Anodyne or Composing Pill. No. 1.

Take of strained Opium, two grains; Almond Soap, half a scruple; Peruvian Balsam, one drop; let them be perfectly mixed and divided into six pills. To be taken as directed at page 51.

Strengthening Infusion. No. 2.

Take of fresh powdered Peruvian Bark, one ounce; yellow rind of Orange-Peel, three drams; infuse them with a Pint of boiling Water, in a large tea-pot, and in a

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warm

warm place, for the space of two days: let them be stirred now and then, and to the strained Liquor, add three drams of the Compound Spirit of Lavendar, and of Confection of Kermes, half an ounce. A Teacup full may be taken as directed at page 64.

Anodyne Opiate Pill. No. 3.

The same as no. 1, which see, and take as directed at p. 65.

Strengthening Pills. No. 4.

Take of the soft Extract of Peruvian Bark, two drams; fine Powder of Myrrh, and Salt of Steel, of each one dram; Essential Oil of Cinnamon, four Drops; mix them well together; make the whole into a mass and divide it into forty Pills, to be taken as at p. 68.

Opiate Mixture. No. 5.

Take of simple Mint-Water, five ounces, Mindererus's Spirit, half an ounce, Thebaic tincture, forty drops, Syrup of White Poppies, three drams. Take two spoons full occasionally, as at p. 74, till the flurry of spirits, and pinchings in the bowels go off.

Antimo-

FORMS OF MEDICINE. 435

Antimonial Vomit. No. 6.

Take of Emetic Tartar, three grains, Spring Water, one ounce and half, Oxymel of Squills, three drams. To be given as at p. 74.

Deobstruent Pills. No. 7.

Take of Socotorine Aloes, Extract of black Hellebore, and Almond Soap, of each one dram, Effential Oil of Tansy, four drops, make them into a mass for forty Pills; to be taken as at p. 74.

Strengthening Infusion. No. 8.

Take the Infusion, no. 2, to which add one dram of Elixir of Vitriol, and take as mentioned at p. 82.

Astringent Injection. No. 9.

Take of Alum, and White Vitriol, in powder, of each one dram, dissolve them in one pint of boiling water, and when cold filter the solution through paper.

It may be used milk-warm, with a womb syringe, as directed at p. 83, twice a-day.

436 FORMS OF MEDICINE.

Cathartic or Purging Draught. No. 10.

Take of Limoniated Infusion of Sena, two ounces, in which dissolve three drams of Manna, and afterwards add one dram of the Compound Spirit of Lavendar. To be taken as directed at p. 91.

Alterative Decoction. No. 11.

Take of cut Sarsaparilla Root, one ounce and half, boil it slowly in a quart of pure, soft water, to the consumption of half; and to the strained liquor, add one pint of the Strengthening Infusion no. 2. Half a pint may be given as mentioned at p. 94.

Cathartic or Purging Draught. No. 12.

The same as that at No. 10, which use as directed at p. 92.

Cooling Ptisan. No. 13.

Take of Sena Leaves, and Crystals of Tartar, of each two drams; Black Tamarinds one ounce. Infuse them in a pint of boiling spring water; and of the strained liquor take two or three spoons full, as the case, at p. 93, may require.

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FORMS OF MEDICINE. 437

Restorative Infusion. No. 14.

Take of the Alterative Decoction no. 11, one pint, Soft Extract of Peruvian Bark, two drams. To be given as directed at p. 94.

Restorative, Strengthening Infusion. No. 15.

Take of Restorative Infusion no. 14, half a pint, Elixir of Vitriol, forty drops.

To be given as at p. 100.

Volatile Liniment. No. 16.

Take Oil of Almonds, one ounce and half; Volatile Aromatic Spirit, three drams; shake them together 'till they incorporate, and let a tea-spoon full be rubbed in upon the back and loins twice a-day, as directed at p. 101.

Strengthening Plaster. No. 17.

Take of common Plaster, two ounces; Myrrh and Frankincense in powder, of each half an ounce; melt the Common Plaster and add the rest, by degrees, 'till they incorporate. To be spread on leather, and applied to the small of the back as directed at p. 101.

Purging

438 FORMS OF MEDICINE.

Purging Potion. No. 18.

Take Purging Draught no. 10. It may be given as directed at p. 102.

Alterative Pill. No. 19.

Take of the laxative Mercurial Pill, according to the *Edinburgh* Dispensatory, and Extract of Hemlock, of each one dram; mix, and divide them into twenty pills; which take as directed at p. 102.

Strengthening, Bitter Infusion. No. 20.

Take of fresh powdered Peruvian Bark, half an ounce, Tops of lesser Centaury, and yellow, fresh rind of Seville Orange-Peel, of each half an ounce; infuse them in one pint of boiling water, for twenty-four hours, and to the strained Liquor add two drams of the bitter Tincture of the *London* Dispensatory; and take as directed at p. 102.

Aperient Apozem. No. 21.

Take of the fresh Root of Dandelion, sliced, two ounces; boil it slowly in one quart of soft water to the consumption of
half,

FORMS OF MEDICINE. 439

half; to the strained Liquor, add half an ounce of soluble Tartar, and three drams of Spirit of Lavendar. To be taken as at p. 116.

Uterine Injection. No. 22.

Take of the infusion of White Poppy Heads, strained, one pint; *Goulard's* Extract of Lead, one tea spoon full; Tincture of Myrrh, half an ounce. To be used as mentioned at p. 117.

Saline Mixture. No. 23.

Take of fresh Lemon Juice one ounce and a half, Salt of Tartar one dram; add six ounces of simple Mint Water, and half an ounce of the Syrup of White Poppies. Two or three spoonsful to be taken occasionally, as directed at p. 117.

Anodyne Clyster. No. 24.

Take one large, white Poppy Head bruised; of dried Elder Flowers, half an ounce; boiling water half a pint; to the strained liquor add twenty or thirty drops of Thebaic Tincture. To be administered as at p. 117.

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440 FORMS OF MEDICINE.

Alterative Decoction. No. 25.

See this decoction at no. 11, which give, as directed at p. 118.

Hemlock Pills. No. 26.

Take of the extract of Hemlock one dram; Essential Oil of Peppermint, two drops; divide the mass into twelve pills, one or two of which may be taken twice a day, as mentioned at p. 118, either alone, or with the Alterative Decoction. No. 11.

Astringent Injection. No. 27.

See this Injection no. 9, which use as directed at p. 130.

Strengthening Infusion. No. 28.

See this medicine at no. 2, of which give a tea-cup full twice a day, in the case mentioned at p. 130.

Astringent Injection. No. 29.

See Injection no. 9, which use as directed at p. 135.

Opiate Pill. No. 30.

See this Pill no. 1, which may be given
every

FORMS OF MEDICINE. 441

every six or eight hours, should the case be extremely urgent, as at p. 140.

Laxative, Balsamic Mixture. No. 31.

Take of Spermacæti, dissolved in the yolk of a fresh egg, two drams, Hyssop Water seven ounces, Magnesia Alba two drams, Nitre half a dram, Balsamic Syrup half an ounce. A tea-cup full to be taken every two or three hours, as directed at p. 140.

Emetic Draught. No. 32.

See this vomiting draught no. 6, and which take as at p. 141.

Anodyne Julep. No. 33.

Take of the Tincture of Red Roses, according to the *London Dispensatory*, seven ounces; Tincture of Cinnamon, three drams; Thebaic Tincture, forty drops; Syrup of Red Poppies half an ounce. To be taken as at p. 147.

Strengthening Infusion. No. 34.

See this Medicine no. 2, of which give a tea-cup full twice a-day as directed at p. 154.

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442 FORMS OF MEDICINE.

Laxative Mixture or cooling Ptisan. No. 35.

See this Mixture no. 13, which may be taken as at p. 156.

Strengthening Infusion. No. 36.

See this Medicine no. 2, of which give a tea-cup full twice or thrice a-day, as at p. 156.

Anodyne Pill. No. 37.

See this Pill at No. 1, which may be taken as at p. 156.

Opiate Clyster. No. 38.

See this at No. 14, to be administered as at p. 163.

Cooling Lotion. No. 39.

Take of the Sugar of Lead half a dram, Spring Water half a pint. To be used as directed at p. 164.

Opening Electary. No. 40.

Take fresh Pulp of Cassia one ounce, Flake Manna half an ounce, Crystals of Tartar, in extreme fine powder, three drams; Syrup of Red Poppies, a sufficient quantity
to

to make the whole into an Electary, to be taken in the quantity and manner mentioned at p. 164.

Pile Ointment. No. 41.

Take of the White Ointment of Elder, according to the *London Dispensatory*, one ounce; White Wax one dram; Sugar of Lead two scruples, grind the last with a few drops of oil, then let the whole be melted over a very flow fire, strain it through a double funnel, and stir it till cold. To be spread on fine linen rag and applied to the affected part, as mentioned at p. 164.

Strengthening Infusion. No. 42.

See this Infusion no. 2, to half a pint of which add half a dram of Nitre, and take as directed at p. 165.

Anodyne or Opiate Emulsion. No. 43.

Take of the common Emulsion, made with blanch'd Almonds, one pint, Thebaic Tincture, thirty drops; take a cup full frequently when in pain, or as the case mentioned at p. 169 may require.

444 FORMS OF MEDICINE.

Nephritic Emulsion. No. 44.

Take of the Anodyne Emulsion, no. 43, half a pint, Oil of Tartar, per deliquium, one dram. Three or four spoons full may be taken occasionally, as at p. 170, when affected with the Gravel.

Strengthening Infusion. No. 45.

See this Medicine at no. 2, and take it as directed at p. 172.

Anodyne Emulsion. No. 46.

See this Emulsion at no. 43, which take as required at p. 175.

Emollient Bolus. No. 47.

Take of the compound Powder of Gum Tragacanth half a dram, Syrup of White Poppies a sufficient quantity. Take as directed at p. 175.

Balsamic Mixture. No. 48.

See this Mixture no. 31, of which take a small cup full, as occasionally required at p. 175.

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FORMS OF MEDICINE. 445

Alterative Decoction. No. 49.

See this Medicine at no. 11, which take as required at p. 176.

Opiate Pill. No. 50.

See this Pill no. 1; it may be occasionally taken, as at p. 205.

Stomachic Tincture. No. 51.

Take Elixir of Aloes half an ounce; Volatile Tincture of Guaiacum two drams, mix. Thirty or forty drops may be taken occasionally in all Spice Tea, as indicated at p. 206:

Madame Nouffer's Worm Powder. No. 52.

Take of the Root or *Male Fern*, in fine Powder, two drams, mix it in any liquor, and take it in bed early in the Morning. Two hours after; the following Bolus is directed. Take of the Panacea of Mercury, and dry Refin of Scammony, each, twelve grains; of Gamboge, five grains; reduce them into fine powder, and make a Bolus, with a sufficient quantity of Syrup. See p. 208. This Bolus ought never to be directed without great caution, and proper advice.

Sto-

446 FORMS OF MEDICINE.

Stomachic Pills. No. 53.

Take of the Stomachic Pill, according to the *Edinburgh* Dispensatory, two drams, divide into twenty Pills, and take two every day, between breakfast and dinner, or as indicated at p. 213, washing them down with a spoonful of Tanfy Tea.

Aromatic Plaster. No. 54.

Take of the Stomach Plaster, of the *London* Dispensatory, a sufficient quantity, let it be spread on fine leather, and applied warm to the pit of the stomach, as at p. 213.

Peruvian Tincture. No. 55.

Take of the finest, fresh powdered Peruvian Bark, one ounce; *Cinnamon Buds*, and lesser Cardamom seeds, husk'd, of each, one dram; Proof Spirit, half a pint; let them digest for a week with slow heat, and in a close corked bottle which should frequently be shaken. Filter the Tincture thro' paper; and take two tea-spoons full, or more, two hours before dinner, in Bath, Pyrmont Water, or Orange-peel Tea, as directed at p. 214.

Di-

FORMS OF MEDICINE. 447

Diuretic Mixture. No. 56,

Take of the Vinegar of Squills, one ounce and half; Salt of Tartar, one dram: When the fermentation is over, add of Peppermint Water, fix ounces; Tincture of Antimony, two drams; Thebaic Tincture, one dram; Syrup of Orange-peel, half an ounce. Take two spoons full, as indicated at p. 328, and repeat the dose, occasionally, 'till it produces a sensible effect, by urine, or otherwise.

Aperient Apozem. No. 57.

See this Apozem. at no. 21; of which take a large tea-cup full twice or thrice a-day, as directed at p. 329.

Sudorific Powder. No. 58.

Take of Emetic Tartar, four grains; strain'd Opium, dried and reduced into powder, three grains; Magnesia, one dram; mix them perfectly, and divide into six papers of powder; one of which may be taken in a small quantity of any liquid, going to bed, so as to raise a sweat, as directed at p. 334.

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448 FORMS OF MEDICINE.

Sudorific Julep. No. 59.

Take of the Camphorated Julep, seven ounces ; *Mindererus's* Spirit, three drams ; mix, and take two spoons full occasionally, as indicated at p. 334.

Medicated, Spring Juices. No. 60.

Take of the fresh juices of Green Walnuts, before they begin to shell, of Seville Oranges, Garden Scurvy-grass, and Water Cresses, of each half a pint ; mix them together and let them stand 'till the dregs subside ; pour off the clear liquor through a double flannel strainer, and add one ounce of the finest Flake Manna, which dissolve without heat. Take a small tea-cup full, once or twice a-day, as directed at p. 342, and let the Juices be often fresh prepared, least they should spoil by long keeping.

C O N C L U S I O N,